ECON 300: Randomized Control Trials for Poverty Reduction

Ariel BenYishay

<u>abenyishay@wm.edu</u>

Class meetings: T, TH 12:30 – 1:50

Office hours: TH 2-3 and by appointment

COURSE OBJECTIVES

Randomized controlled trials (RCTs) have increasingly become a common tool used by researchers and policymakers alike to evaluate governmental and non-governmental programs and better understand which policies work and which do not. This course introduces students to the use and scope of RCTs for tackling poverty around the world, including to support microenterprises, encourage key health practices, fight corruption, and promote social cohesion after civil war.

This course grapples with a wide array of theoretical and empirical issues related to international economic development. The course combines elements of economics, statistics, and policy analysis. It is intended to equip students with the economic reasoning underlying policy analysis in the presence of poverty traps and weak institutions, as well as an understanding of causal inference to become consumers and producers of policy-relevant research and evaluation.

COURSE RESOURCES

The textbook for this course is:

Banerjee, Abhijit and Esther Duflo. *Poor Economics*. [Referenced as BD below]

We will also rely on a series of articles:

- Beaman, L., A. BenYishay, J. Magruder, and A. M. Mobarak. 2020. "Can Network Theory-based Targeting Increase Technology Adoption," Mimeo.
- Beath, A., A. BenYishay, G. d'Adda, P. Grosjean, and Roberto A. Weber. "Can vouchers reduce elite capture of local development projects? Experimental evidence from the Solomon Islands." *Journal of Public Economics* 160 (2018): 117-131.
- BenYishay, Ariel, Andrew Fraker, Raymond Guiteras, Giordano Palloni, Neil Buddy Shah, Stuart Shirrell, and Paul Wang. "Microcredit and willingness to pay for environmental quality: Evidence from a randomized-controlled trial of finance for sanitation in rural Cambodia." *Journal of Environmental Economics and Management* 86 (2017): 121-140.
- BenYishay, Ariel and A. Mushfiq Mobarak. 2019. Social Learning and Incentives for Experimentation and Communication, *The Review of Economic Studies*, Volume 86, Issue 3, Pages 976–1009
- BenYishay, A, F. Kondylis, M. Jones and A. M. Mobarak. "Gender Gaps in Technology Diffusion," *Journal of Development Economics*, 143 (March 2020).

- Bertrand, Marianne, Simeon Djankov, Rema Hanna, and Sendhil Mullainathan. 2007. Obtaining a Driver's License in India: An Experimental Approach to Studying Corruption. *Quarterly Journal of Economics* 122, no. 4: 1639-1676.
- Cohen, Jessica, and Pascaline Dupas. "Free distribution or cost-sharing? Evidence from a randomized malaria prevention experiment." *Quarterly Journal of Economics* 125, no. 1 (2010)
- Deaton, Angus. Randomization in the tropics revisited: a theme and eleven variations. No. w27600. National Bureau of Economic Research, 2020.
- De Mel, S., D. McKenzie, and C. Woodruff. 2008. Returns to Capital in Microenterprises: Evidence from a Field Experiment. *Quarterly Journal of Economics* 123, no. 4: 1329–1372.
- Fearon, James D., Macartan Humphreys, and Jeremy M. Weinstein. "Can development aid contribute to social cohesion after civil war? Evidence from a field experiment in post-conflict Liberia." *American Economic Review* 99, no. 2 (2009): 287-91.
- Gertler, Paul J., Patrick Premand, Sebastian Martinez, Christel M. J. Vermeersch, and Laura B. Rawlings. 2010. Impact Evaluation in Practice. World Bank. http://elibrary.worldbank.org/content/book/9780821385418.
- Karlan, Dean, and Jonathan Zinman. "Observing unobservables: Identifying information asymmetries with a consumer credit field experiment." *Econometrica* 77, no. 6 (2009): 1993-2008
- Miguel, E., and M. Kremer. 2004. Worms: identifying impacts on education and health in the presence of treatment externalities. *Econometrica* 72, no. 1: 159–217.
- Olken, Benjamin A. "Monitoring corruption: evidence from a field experiment in Indonesia." *Journal of political Economy* 115, no. 2 (2007): 200-249.

Assignments

Homework Assignments

There will be 3 homework assignments in the first half of the course that will provide you with an opportunity to learn about and implement experimental designs. Please submit these assignments via Blackboard.

Project Assignment

You will complete this assignment individually. The tasks will largely be completed over the second half of the semester. You will have the opportunity to choose your own research question and to design a study that answers this question.

The assignment has several phases:

- 1. Research Question
- 2. Experimental Design
- 3. Presentation
- 4. Final Paper

Grades

Assignment 1	15%
Assignment 2	15%
Assignment 3	15%
Project presentation	20%
Final paper	35%

SCHEDULE

Date	Topic	Readings	Assignments
Jan 28	Welcome		
Feb 2	Global poverty and RCTs	BD Ch. 1	
Feb 4	Statistics overview	Gertler et al Chapters 1 and 3	
Feb 9	Basic assignment	Gertler et al Ch. 4	
Feb 13	Randomized phase-in and rotation		
Feb 16	Randomized encouragement		Assignment #1 due
Feb 18	Ethics		
Feb 23	Surveys		
Feb 25	Poverty measurement		
Mar 2	Poverty measurement		
Mar 4	BREAK		
Mar 9	Social diffusion in agriculture – 1	BenYishay & Mobarak (2019)	Assignment #2 due
Mar 11	Social diffusion in agriculture – 2	BenYishay et al (2020)	
Mar 16	Social diffusion in agriculture – 3	Beaman et al (2020)	
Mar 18	Lab-in-the-field	BD Ch. 10	
		Fearon et al (2009)	
Mar 23	Lab-in-the-field	Beath et al (2017)	
Mar 25	Worms	BD Ch. 3	
		Miguel and Kremer (2004)	
Mar 30	Malaria	Cohen and Dupas (2010)	Assignment #3 due
Apr 1	RCTs in the field (Guest speaker)		
Apr 6	BREAK		
Apr 8	Flex		
Apr 13	Presentations		
Apr 15	Presentations		
Apr 20	Presentations		
Apr 22	Presentations		
Apr 27	Credit	BD Ch. 7	
		Karlan and Zinman (2009)	
Apr 29	Entrepreneurship	De Mel et al (2008)	
May 4	Corruption	Bertrand et al (2007)	
May 6	Perspectives on RCTs	Deaton (2020)	Final Paper due