Field Experiments – Design and Policy

Syllabus

Instructor:	Dagmara Celik Katreniak
	dasha.katreniak@yahoo.com
Course schedule:	to be updated
Course website:	to be updated
Office hours:	upon request
Grant proposal due to:	

Overview

Experimental economics has become a popular research field in economics. The focus of this course, Field Experiments – Design and Policy, will be to learn and train how to design and implement field experiments. The course will be organized as follows.

In the first part of the course we will talk about how to design and implement an intervention in the field, how to minimize the implementation failures and how to analyze collected data. The first part will end with midterm examination.

The second half of the course will be dedicated to ”topics in field experiments”. We will use existing results from successful field experiments to discuss topics in development economics, as well as their designs, implementation and data analysis. Final examination will complete the course agenda.

Expectations

Students are expected to prepare for the course, follow the reading list and participate actively during the classes. Active and regular **participation** (not less

than 80%) is rewarded by 5% of the total score. No prerequisites required; the course is open to all students. During the school year students will be given three **quizzes** whose results will count as 15% of the final grade. Participation on quizzes will be, however, voluntary. **Midterm and Final examination** will count together as 50%, 20% for the midterm and 30% for the final examination. Students will be expected to write a project proposal, which should serve as a training to write a grant proposal. The proposal's value will be 30% of the final grade. **Proposals** can be prepared individually or in pairs. Each student/group will have a chance to discuss her/their proposal in a form of short presentation during the exercise sessions highlighting the main idea of the proposed intervention, design and its peculiarities. The **presentation** should help students to eliminate mistakes and/or improve the proposal quality. Such exercise should train students to write successful grant proposals.

Grading

- Participation: 5%
- Quizzes: 15%
- Midterm: 20%
- Final: 30%
- Project proposal: 30%

Block I: Field Experiments

Lecture 1: Introduction to the Experimental economics

- Laboratory experiments vs. Field experiments vs. Laboratory experiments in the field; Randomized Control Trials versus other methods
- Exercise Session: Randomization
- Readings: *Duflo, Glennerster and Banerjee 2007, Bruhn and McKenzie 2009, List 2007*

Lecture 2: Field experiment designs I

- Types of designs, designing stages
- Exercise Session: Implementation and its difficulties (externalities, attrition, spillover effects, selection, Hawthorne and John Henry effects, …)
- Readings: *Duflo, Glennerster and Banerjee 2007, Miguel and Kremer 2004, Banerjee, Duflo, Cole, and Linden 2007, Angrist et al 2002, Olken 2005*

Lecture 3: Field experiment designs II

- Stratification, blocking, level of outcomes
- Exercise Session: Budget scheme and Proposal requirements
- Readings: *Duflo, Glennerster and Banerjee 2007, Miguel and Kremer 2004, Banerjee, Duflo, Cole, and Linden 2007*

Lecture 4: Field experiment designs III

- Sample size and Power Calculations
- Exercise Session: Optimal Design Software
- Readings: *Duflo, Glennerster and Banerjee 2007, OD Software Manual, Blimpo 2010*

Lecture 5: Data analysis I

- Measurement of treatment effects
- Exercise Session: STATA software
- Readings: *Duflo, Glennerster and Banerjee 2007, Microeconometrics using STATA*

Lecture 6: Data analysis II

- Measurement of treatment effects
- Exercise Session: Departures from Perfect Randomization and Recapitulation
- Readings: *Duflo, Glennerster and Banerjee 2007, Microeconometrics using STATA*

Lecture 7: Exam

- Midterm examination

Block II: Topics

Lecture 1: Field experiments in health

- Readings: *Miguel and Kremer 2004, Chaudhury et al 2006*
- Exercise session: Poverty

Lecture 2: Field experiments in education

- Readings: *Angrist, Bettinger, Bloom, King and Kremer 2002*
- Exercise session: Aid versus No Aid

Lecture 3: Field experiments in consumer choice

- Readings: *Brown, Hossain and Morgan 2010*
- Exercise session: Presentations of project proposals

Lecture 4: Field experiments in Labor economics

- Readings: *Bertrand and Mullainathan 2004; Fehr and Goette 2007*
- Exercise session: Presentations of project proposals

Lecture 5: Field experiments in microfinance

- Readings: *de Mel, McKenzie and Woodruff 2008, McKenzie and Woodruff 2008*
- Exercise session: Presentations of project proposals

Lecture 6: Field experiments in credit and savings

- Readings: *Feigenberg, Field and Pande 2010*
- Exercise session: Presentations of project proposals and recapitulation

Lecture 7: Final Examination

Literature

Articles and Working Papers

- *Angrist, J.D., Bettinger, E., Bloom, E., King, E. and Kremer, M. (2002): Vouchers for Private Schooling in Colombia: Evidence from a Randomized Natural Experiment, American Economic Review, Vol. 92, No. 5*
- *Banerjee, A., Cole, A., Duflo, E. and Linden, L. (2007): Remedying Education: Evidence from Two Randomized Experiments in India, The Quarterly Journal of Economics, MIT Press, Vol. 122(3)*
- *Bertrand, M. and Mullainathan, S. (2004): Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discriminatio, American Economic Review, Vol. 94*
- *Blimpo (2010): Team Incentives for Education in Developing Countries A Randomized Field Experiment in Benin, Job market paper, New York University*
- *Brown, J., Hossain, T. and Morgan, J. (2010): Shrouded Attributes and Information Suppression: Evidence from the Field, The Quarterly Journal of Economics, Vol. 125, Issue 2*
- *Bruhn, M. and McKenzie, D. (2009): In Pursuit of Balance, Randomization in Practice in Development Field Experiments, American Economic Journal: Applied Economics, Vol. 1, No. 4*
- *Chaudhury, N., Hamer, J., Kremer, M., Muralidharan, K. and Rogers, F.H. (2006): Missing in Action: Teacher and Health Worker Absence in Developing Countries, Journal of Economic Perspectives, Vol. 20, No. 1*
- *de Mel, S., McKenzie, D. and Woodruff, C.(2008): Returns to Capital in Microenterprises: Evidence from a field experiment, The Quarterly Journal of Economics, Vol. 123, Issue 4*
- *Duflo, E., Glennerster, R. and Banerjee, A. (2007): Using Randomization in Development Economic Research: A Toolkit, Handbook of Development Economics, Vol. 4*

- *Fehr, E. and Goette, L. (2007): Do Workers Work More if Wages Are High? Evidence from a Randomized Field Experiment, American Economic Review, Vol. 97, No.1*
- *Feigenberg, B., Field, E. M. and Pande, R. (2013): Building Social Capital Through MicrFinance, Review of Economic Studies, 80(4)*
- *List, J.A. (2007): Field Experiments: A Bridge Between Lab and Natuarlly-Occurring Data, NBER Working Papers 12992*
- *Miguel, E. and Kremer, M. (2004): Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities, Econometrica, Vol. 72, Issue 1*
- *McKenzie, D. and Woodruff, C.(2008): Experimental Evidence on Returns to Capital and Access to Finance in Mexico, The World Bank Economic Review, Vol. 22, No.3*
- *Olken, B. (2007): "Monitoring Corruption: Evidence from a Field Experiment in Indonesia." Journal of Political Economy 115, 2*

Books and Manuals

- *Microeconometrics using Stata*
- *OD Software Manual*