

Class 1 M 9/27	Introduction to the experimental approach	<p>Course overview and objective</p> <p>Overview of the timeline for an RCT</p> <ul style="list-style-type: none"> • how a randomized evaluation (RE) can lead to large-scale change • a road map for an evaluation 	<ul style="list-style-type: none"> - Book Chapter 1* - Glennerster, Murray, and Pouliquen (2021), The Media or the Message? Experimental Evidence on Mass Media and Modern Contraception Uptake in Burkina Faso
Class 2 W 9/29	Why randomize and what questions	<p>Why randomize</p> <ul style="list-style-type: none"> • Measuring causal impact • Nonexperimental/ quasi-experimental methods • Randomization and causal inference • REs Advantages & limitations <p>Asking the right questions</p> <ul style="list-style-type: none"> • Non-impact evaluation • Needs assessment for • Prioritizing 	<ul style="list-style-type: none"> - Book Chapter 2 & 3 - Duflo, Glennerster, Kremer (2008), Using Randomization in Development Economics (pages 1-13)* - Athey and Imbens (2016) The Econometrics of Randomized Experiments (pages 1-10)* - Deaton (2020), Randomization in the Tropics Revisited: A Theme and Eleven Variations - Olken (2009), Do Television and Radio Destroy Social Capital? * - Almond, Doyle Jr, Kowalski, and Williams (2010), Estimating Marginal Returns to Medical Care: Evidence from At-Risk Newborns Indonesia Family Life Survey - Lazear, Malmendier, Weber (2012), Sorting in experiments with application to social preferences
Class 3 M 10/4	Randomizing (part 1)	<ul style="list-style-type: none"> • Opportunities to Randomize • Choosing the Level of Randomization • Deciding Which Aspects of the Program to Randomize 	<ul style="list-style-type: none"> - Chapter 4.1 – 4.3* - Kopper and Sautmann (2020), JPAL randomization resources - Duflo and Saez (2003), The Role of Information and Social Interactions in Retirement Plan Decisions: Evidence from a Randomized Experiment
Class 4 W 10/6	Randomizing (part 2)	<ul style="list-style-type: none"> • The Mechanics of Simple Randomization • Stratified and Pairwise Randomization • A catalogue of Designs 	<ul style="list-style-type: none"> - Chapter 4.4 – 4.6* - Glennerster, Murray, and Pouliquen (2021), The Media or the Message? Experimental Evidence on Mass Media and Modern Contraception Uptake in Burkina Faso

			<ul style="list-style-type: none"> - Leaver, Ozier, Serneels, and Zeitlin (2020), Recruitment, Effort, and Retention Effects of Performance Contracts for Civil Servants: Experimental Evidence from Rwandan Primary Schools - Bruhn and McKenzie (2009), In the Pursuit of Balance: Randomization in Practice in Development Field Experiments - Bai (2020), Optimality of matched-pair designs in randomized controlled trials
Class 5 M 10/1 1	Ethics	<ul style="list-style-type: none"> ● How to think through the ethics of REs ● The Belmont principles / IRB form ● Why people criticize REs 	<ul style="list-style-type: none"> - 2 chapters from <i>The Oxford Handbook on Professional Economic Ethics</i> <ul style="list-style-type: none"> ○ Glennerster and Powers (2013), Balancing Risk and Benefit: Ethical Tradeoffs in Running Randomized Evaluations* ○ Alderman, Das, and Rao (2016), Conducting Ethical Economic Research: Complications from the Field - Deaton (2020), Randomization in the Tropics Revisited: A Theme and Eleven Variations*
Class 6 W 10/1 3	Outcomes and principles (part 1)	<ul style="list-style-type: none"> ● Specifying Outcomes and Indicators ● Specifying Data Sources 	<ul style="list-style-type: none"> - Chapter 5.1 -5.2* - Buchmann et al (2018), Baseline parent survey - Singh (2015), How standard is a standard deviation? - Demographic and Household Survey questionnaires - World Health Organization (WHO) Child growth standards - Angrist, Evans, Filmer, Glennerster, Rogers, and Sabarwal (2020), How to Improve Education Outcomes Most Efficiently? A Comparison of 150 Interventions Using the New

			Learning-Adjusted Years of Schooling Metric -
Class 7 M 10/18	Outcomes and principles (part 2)	<ul style="list-style-type: none"> Assessing and field testing outcome measures: who/ when and how of surveys Deep dive into measuring education, health, income/ consumption 	- Book Chapter 5.3* - Townsend (2013), Chronicles from the Field - Bergman, Chinco, Hartzmark, and Sussman (2020), Survey Curious? Start-Up Guide and Best Practices For Running Surveys and Experiments Online (October 05, 2020)
Class 8 W 10/20	Outcomes and principles (part 3)	<ul style="list-style-type: none"> A catalogue of non-survey Instruments Deep dive into woman empowerment 	- Book Chapter 5.4* - Casey, Glennerster, Miguel (2014) Reshaping Institutions: Evidence on Aid Impacts Using a PreAnalysis Plan - Buchmann et al (2021), A Signal to End Child Marriage: Theory and Experimental Evidence from Bangladesh - Beaman et al (2009), Powerful Women: Does Exposure Reduce Bias? - Breza, Kaur, and Shamdasani (2017), The Morale Effects of Pay Inequality -
Class 9 M 10/25	Statistical power	<ul style="list-style-type: none"> What power is & how it is determined Using power analysis to determine sample size Which level to randomize Other design issues. 	- Book Chapter 6* - Duflo, Glennerster, and Kremer (2007), Using Randomization in Development Economics Research: A Toolkit
Class 10 W 10/27	Increasing statistical power in practice	<ul style="list-style-type: none"> How to increase power Examples from papers 	- Glennerster, Murray, and Pouliquen (2021), The Media or the Message? Experimental Evidence on Mass Media and Modern Contraception Uptake in Burkina Faso - Banerjee, Cole, Duflo, and Linden (2007), Remedying Education: Evidence from Two Randomized Experiments in India
Class 11 M 11/1	Threats	<ul style="list-style-type: none"> Common threats to the integrity of the experiment. Partial Compliance Attrition 	- Book Chapter 7.1 – 7.2* - Miguel and Kremer (2004), "Worms: Identifying Impacts on Education and

		<ul style="list-style-type: none"> Spillovers and Evaluation-Driven Effects 	<p>Health in the Presence of Treatment Externalities"</p> <ul style="list-style-type: none"> Buchmann et al (2021), A Signal to End Child Marriage Book Chapter 7.3 – 7.4* Miguel and Kremer (2004), Worms: Identifying the Impacts on Education and Health in the Presence of Externalities Zwane et al (2010), Being Surveyed Can Change Later Behavior and Related Parameter Estimates
Class 12 W 11/3	Analysis (part 1)	<p>A catalogue of corrections How to analyze the data from a randomized evaluation and make inferences about the impact of a program:</p> <ul style="list-style-type: none"> Intention-to-Treat Analysis, TOT, Multiple hypothesis testing and other corrections A catalogue of Corrections 	<ul style="list-style-type: none"> Book Chapter 8.1 – 8.2* Athey and Imbens (2016), The Econometrics of Randomized Experiments* Young (2018), Channelling Fisher: Randomization Tests and the Statistical Insignificance of Seemingly Significant Experimental Results* Lee (2002), Trimming for Bounds on Treatment Effects with Missing Outcomes
Class 13 M 11/8	Analysis (part 2)	<p>Integrating big data techniques into RCT analysis</p> <ul style="list-style-type: none"> Examples from Burkina Faso and Bangladesh 	<ul style="list-style-type: none"> Athey and Imbens (2017), The State of Applied Econometrics: Causality and Policy Evaluation* Chernozhukov, Demirer, Duflo, and Fernandez-Val (2020), Generic Machine Learning Inference On Heterogenous Treatment Effects In Randomized Experiments, With An Application To Immunization In India
Class 14 W 11/10	Analysis (part 3)	<p>Pre-analysis plans (PAP):</p> <ul style="list-style-type: none"> Why, whether and how to use a PAP Examples of designing PAP <p><i>Student presentation of proposed RCT</i></p>	<ul style="list-style-type: none"> Book Chapter 8.3 Casey, Glennerster, and Miguel (2013), The GoBiFo Project Final Report: Assessing the Impacts of Community Driven Development in Sierra Leone & Pre-Analysis Plan *

			<ul style="list-style-type: none"> - Olken (2015) The Promise and Perils of PreAnalysis Plans <p>other examples of PAPs</p> <ul style="list-style-type: none"> - Finkelstein et al (2010), The Oregon Health Insurance Experiment: Evidence from the First Year & Pre-Analysis Plan - Olken et al (2014), Generasi Pre-Analysis Plan - Berkeley Initiative for Transparency in the Social Sciences
Class 15 M 11/15	Meta-analysis	Guest lecture from Professor Michael Kremer	
Class 16 W 11/17	Generalizability	<p>Designing an experiment to achieve maximum generalizability:</p> <ul style="list-style-type: none"> ● Internal and external validity ● The commonality of generalizability to all forms of evaluation ● Designing randomized evaluations with an eye toward generalizability ● Combining information from randomized and nonrandomized studies ● Testing whether results generalize ● The multiple paths from research to policy change 	<ul style="list-style-type: none"> - Book Chapter 9 - Bates and Glennerster (2017), The Generalizability Puzzle* - Banerjee et al (2016), Mainstreaming and Effective Intervention - Piper et al (2018), Scaling up successfully - JPAL Pathways to policy change
Wk 11/22		Thanksgiving break	
Class 18 M 11/29	Cost effectiveness	<p>Comparative Cost-effectiveness Analysis</p> <ul style="list-style-type: none"> ● When to use cost-effectiveness analysis or Cost-benefit analysis ● Issues to consider when design ● Sensitivity analysis <p><i>Student presentation of proposed RCT.</i></p>	<ul style="list-style-type: none"> - Book Chapter 9.3 - Dhaliwal et al (2012), Comparative Cost-Effectiveness Analysis to Inform Policy in Developing Countries: A General Framework with Applications for Education
Class 19 W 12/1	Conclusion and student presentations	<p>From Research to Policy Action</p> <p><i>Student presentation of proposed RCT.</i></p>	

Wk 12/6		Finals week	
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