ARE 6464

Experimental Methods for Program Evaluation

Spring 2016

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Meeting Times: Tuesdays and Thursdays, 4-5:15pm

Meeting Location: Young 138

Prerequisites: This class requires you have taken an introduction to statistics or econometrics class at the masters or PhD level, or equivalent. A masters or PhD level microeconomic theory course is recommended, but not required.

Course description: This class presents the theory and practice behind running field based program experiments, often referred to as randomized controlled trials (RCTs). RCTs fall under the general field of impact evaluation, which assesses the impact of programs on individual or community outcomes. RCTs are unique in that, to be done properly, they need to be incorporated into initial program designs. In this class you will learn how to conduct all aspects of experimental program evaluation, including how to design an appropriate evaluation strategy and work with survey and program staff to ensure the evaluation is completed as designed.

The class will be practical, with theory and examples included throughout. The examples will come from both developing country contexts and Western country program evaluation. By the end of the class you will be expected to know how to design and (at least in theory) conduct an impact evaluation in either a developing or developed country.

Required texts: The required textbook is "Running Randomized Evaluations: A Practical Guide" by Rachel Glennerster and Kudzai Takavarasha. I also recommend "Field Experiments: Design, Analysis, and Interpretation" by Alan Gerber and Donald Green and "Mostly Harmless Econometrics" by Joshua Angrist and Jorn-Steffen Pischke. In addition, my book on impact evaluation may be helpful and is available for free at http://library.iyfnet.org/library/measuring-success-youth-livelihood-interventions. The specific examples we will use will be distributed during class.

Grading: The course grade will be based on short paper summaries (20% of final grade), a replication report (20%), an evaluation design (40%) and a final presentation of the evaluation design (20%). Short paper summaries will be due every two weeks starting at about the middle of the semester. You will choose one paper we discuss in class and write a one to two page summary of the methods used in the paper. For each student, the numerical grade for the course

is calculated as a weighted average of the scores of the average of the components above. Final grades will be determined as follows:

Grading scale:

A+	>96	B+	89-85	C+	74-72	D+	64-62	F	< 55
A	93-95	В	84-80	C	71-69	D	61-60		
A-	90-92	B-	79-75	C-	68-65	D-	59-55		

Storrs Finals Rescheduling: Students may receive permission to reschedule a final if they have finals which are "bunched" or if a student has an "extenuating circumstance". If approval is granted, it is expected that students will inform instructors of their conflict(s) prior to the final. To access the finals schedule, go to: www.registrar.uconn.edu. Office of Student Services policy on rescheduling of finals http://www.ossa.uconn.edu/docs/Final Examination Information.pdf

Extenuating Circumstances: Students with extenuating circumstances are encouraged to visit the Office of Student Services & Advocacy to speak to a staff member as soon as possible. Staff may allow students to reschedule a final due to an unavoidable circumstance, such as religious observances, previously scheduled medical procedures/appointments, attendance at a funeral, or other ceremonies in which you are directly involved in the event. Supporting documentation will be required. Finals are not rescheduled for personal errors, like oversleeping or misreading the finals schedule. Finals are generally not rescheduled due to voluntary travel conflicts. Students (and parents) are encouraged to check the finals schedule before making travel plans.

University Emergency/Closings: In case of a University closing (emergency or severe weather conditions), finals may be rescheduled from the original date/time. The Registrar's Office will determine the makeup finals schedule in these instances. Please check with the Registrar's Office website for the most up to date information available.

Special Needs: If anyone has needs requiring special assistance, please see the instructor so arrangements can be made. http://www.ossa.uconn.edu/facultystaff.html under health for FAQ on this issue and http://www.csd.uconn.edu/accommodation_services.html for overview of accommodations and services at UConn for general info http://www.csd.uconn.edu/ the website for Center for Students with Disabilities and http://www.ossa.uconn.edu/ for Office of Student Affairs and Advocacy.

Cheating Policy: See cheating and plagiarism policy (web site from handbook; see Appendix A Code of Conduct http://www.community.uconn.edu/student_code_appendixa.html and(or) freshman English site on plagiarism

http://freshmanenglish.uconn.edu/instructors/forms/plagiarism.php

Note: We will not have class on March 15, 17 and 22.

CLASS OUTLINE

The major topics of the class will include the following, listed in no particular order:

Review of non-experimental methods: retrospective designs, simple comparison, difference-in-difference, propensity score matching, regression discontinuity and IV

Why randomize: biases in non-experimental methods, omitted variables, limitations of randomization

Timing of evaluation: retrospective versus prospective designs, timing of data collections, how to talk to program managers if you need to

Randomization designs in theory: public and private lotteries, phased-in design, boundary

Randomization designs in practice: program needs versus evaluation needs, working with M&E teams, overseeing program implementation, working with non-evaluators

Generating hypotheses: theory in economics, theory of change for programs, using a standard program to learn new things

Concept note and funding: how to write up a description of the evaluation design, how to find funding

Indicators: how to select from theory of change, don't re-invent the wheel

Survey design and pretesting: how to choose questions, adapting to local context, translation strategies

Survey implementation: hiring, training and managing teams, auditing, finding fake surveys, electronic data collection, managing budgets

Data cleaning: finding survey errors, bounding for attrition, Stata primer

Data analysis: balance tests, what model to use, overcoming errors in implementation and design, controls

Writing a paper: general outline of experimental papers, what to include and what not, selling your results to policy makers and other experimentalists

The class will be divided into three components. The first half of the class will be lecture based and will follow the Glennerster and Takavarasha book. We will cover the entire book, which includes the following chapters:

- 1. The Experimental Approach
- 2. Why Randomize?
- 3. Asking the Right Questions
- 4. Randomizing
- 5. Outcomes and Instruments
- 6. Statistical Power
- 7. Threats
- 8. Analysis
- 9. Drawing Policy Lessons

You are expected to read the appropriate chapter before class. Lectures will cover some of the topics of the chapters and will include additional information. After completing the book, we will cover additional topics as necessary.

In the second component we will look closely at seminal papers in a number of literatures — including development, health and education — that utilize the different methods that we have discussed thus far. We will pay special attention to sections of the papers that people rarely look closely at. Each person will present a paper to the class. You will then conduct a replication of one of the papers using data available online. The end goal of this component is to be able to think critically about the data collection and analysis methods others have used.

The final component will be the development of a concept note for an evaluation design. You will develop a mock evaluation design and write a concept note describing how you will evaluate a program, including how data collection will be conducted. You will present your concept note to the class. Examples of concept notes and presentations will be provided and discussed.