

**Fulbright School of Public Policy and Management
Master of Public Policy in Policy Analysis
Academic Year 2019-2021
Summer 2020**

**SYLLABUS
Policy Evaluation - 3 credits**

Teaching team

Visiting Professor: Edmund J. Malesky (ejm5@duke.edu)
Co-Instructor: Le Viet Phu (phu.le@fulbright.edu.vn)
Teaching Assistant: Nguyen Bach Diep (diep.nguyen.fsppm@fulbright.edu.vn)

Class Meeting Time

Lecture Hours:
Part 1 (Edmund Malesky) Tue-Thu 8.00 – 10.00 AM
Part 2 (Le Viet Phu) Tue-Thu 8.30 – 11.45 AM
Office Hours: Le Viet Phu (Thu, 4 - 5.30 PM)
Nguyen Bach Diep

Learning Objectives

1. Understand the main objectives of rigorous policy evaluation, including how to avoid common pitfalls that lead to incorrect conclusions.
2. Develop ability to select appropriate policy evaluation technique for specific government intervention.
3. Become proficient at reading, analyzing and critiquing data derived from policy evaluation.
4. Know how to design, implement, and interpret results from a simple Randomized Controlled Trial (RCT).
5. Develop ability to construct a Pre-Analysis Plan (PAP), which describes theory of change, outcome variables, analysis techniques, data visualizations for proposed evaluations.

Description

This course offers a first systematic approach to policy evaluation from a perspective of a practitioner. It provides rationale why evaluation may be used to inform and improve policy development, adoption, implementation, and effectiveness, and builds the evidence for policy interventions. We begin with experimental approaches, the gold standard in program evaluation.

The main purpose of randomized evaluations is to determine whether a program has an impact, and more specifically, to quantify how large that impact is. Impact evaluations measure program effectiveness typically by comparing outcomes of those who received the program against those who did not. We will learn basic sets of skills for designing and evaluating policy interventions, and then practice them immediately. The first lecture will be devoted to the goals and organization of program design before beginning our discussion of the experimental ideal. Each subsequent class will delve into particular research tools used in evaluation for attempting to recover the experimental ideal (randomized control trials, survey experiments, regression discontinuity design, matching estimators, and difference-in-differences). Within each lecture, we will discuss the underlying assumptions, power estimations, and diagnostics for determining whether the tool is appropriate for the particular research question.

The course will take the organizational structure of a workshop. Understanding the challenges of teaching econometrics without formulas, we have selected a nuanced approach which offers a harmonic, narrative based, combination of theory, in-class discussions, and computer applications. The course assessment is based on identifying a critical policy question that students are interested in and then designing the ideal evaluation for it. The final project will a Pre-Analysis Plan, a specialized research design that lays out the specific for how a new policy will be evaluated.

Required Readings

- Angrist, Joshua and Jorn-Steffen Pischke (2014). *Mastering 'Metrics: The Path from Cause to Effect*. Princeton University Press.
- Khandker, Shahidur R., Gayatri B. Koolwal, and Hussain A. Samad (KKS, 2010). *Handbook on Impact Evaluation Quantitative Methods and Practices*. The International Bank for Reconstruction and Development, The World Bank. eISBN: 978-0-8213-8029-1
- White, Howard and David A. Raitzer 2017. *Impact evaluation of development interventions: A practical guide*. Asian Development Bank, Manila, Philippines. (HR, 2017)
- Evidence in Governance and Politics. (EGAP, 2018). Methods Guides. <<https://egap.org/list-methods-guides>>
- Additional short reading on specialized topics listed with hyperlinks below.

Assessment

1. Participation: 10%

Students will be provided with a daily set of discussion questions that we will cover in lecture. Participation will be heavily influenced by the quality and sophistication of your answers to those questions.

2. Problem Sets: 30%

Two problem sets using real world evaluations with actual data. Students will submit a .do file analyzing the data and describing results. To get full credit .do file must run without error.

3. **Research proposal: 20%**

Write a 1-page description of theory, hypothesis, and ideas for testing for your final project.

4. **Pre-Analysis Plan: 40%**

For the final project students will provide a full pre-analysis plan (PAP, about 10-12 pages in length) that will involve the collection of primary data, based on the tools and theories used in the class. Students will be expected to review the literature, explain the theory, detail hypotheses, design all of the instruments, explain data collection strategy, and forecast potential pitfalls. The goal is to leave the class with a plan that could quickly be turned into a real-world policy evaluation.

All problem set must be submitted by 08:20, in both electronic copy and hard copy in the box in the lab room, unless otherwise instructed. *For information relating to submissions, grievances, academic dishonesty and special considerations please refer to the Student Guidelines.*

Course Schedule

Part 1: Fundamentals of Policy Evaluation and Randomized Controlled Trials

[Edmund Malesky]

Thursday, June 25: What is Policy Evaluation, Causal Inference, and Randomized Controlled Trials (RCTs)

Importance of evaluation and the difference from monitoring, counterfactuals and the potential outcomes framework

- EGAP, “10 Strategies for Figuring Out if X Caused Y”
- EGAP, “10 Things You Need to Know about Causal Inference”
- Angrist and Pischke, Introduction.
- KKS, pp 3-20.

Basics of field experiments and exploration of different designs.

- KKS, pp. 33-38.
- EGAP, “10 Types of Treatment Effects You Should Know About”.
- EGAP, “10 Things to Know about External Validity”.
- **First Problem Set Released.**

Tuesday, June 30: Designing and Implementing an RCT:

Random assignment, sampling, blocking/stratification, and power calculations.

- KKS, pp. 39-50.

- Angrist and Pischke, Chapter 1.
- EGAP, “10 Things to Know about Randomization”.

Thursday, July 2: Advanced Topics in RCT Design:

Sub-sample analyses, testing for mechanisms, and spillover designs.

- EGAP, “10 Things to Know about Mechanisms”.
- EGAP, “10 Things to Know about Spillovers”.

Tuesday, July 7: Case Study: Improving the Distribution of a Subsidised Rice Programme in Indonesia. *Study a famous policy evaluation in Indonesia from start to finish.*

- JPAL, “Policy Brief on Raskin Rice Program”.
- KKS, pp. 171-179.

Thursday, July 9: Building a Pre-Analysis Plan

- McKenzie, David. 2012. “A Pre-Analysis Plan Checklist.” World Bank Development Impact Blog.
- Ganiminan, Alejandro. 2017. “Pre-Analysis Plan Template.” Berkeley Initiative for Transparency in the Social Sciences.

Part 2: Recovering the Experimental Idea through Natural Experiments [Le Viet Phu]

Tuesday, July 14: Review of RCTs and Introduction to Natural Experiments

What do we do when we are unable to randomize?

- Craig, Peter, Srinivasa Vittal Katikireddi, Alastair Leyland, and Frank Popham 2017. Natural Experiments: An Overview of Methods, Approaches, and Contributions to Public Health Intervention Research. Annual Reviews of Public Health, 38:39-56.
- HR, Chapter 5
- **First Problem Set Due**
- **Second Problem Set Released**

Thursday, July 16: Difference-in-Differences Analysis

Basis assumptions and applications.

- KKS, pp. 71-84, 189-201.
- Angrist and Pischke, Chapter 5.
- **1-page Proposal for Pre-Analysis Plan Due**

Tuesday, July 21: Matching Estimators

Basis assumptions and applications.

- KKS, pp. 53-64, 181-188.

Thursday, July 23: Sharp Regression Discontinuity Design

Basis assumptions and applications.

- KKS, 103-112, 211-216.
- Angrist and Pischke, Chapter 4.

Tuesday, July 28: Fuzzy Regression Discontinuity Design

- KKS, 103-112, 211-216.
- Angrist and Pischke, Chapter 4.

Thursday, July 30: Instrumental Variable Method

- KKS, 87-101, 203-209.
- Angrist and Pischke, Chapter 3.

August 3: **Second Problem Set Due**

August 14: Pre-Analysis Plan Due