Fulbright School of Public Policy and Management Master in Public Policy Academic Year 2017-2019 Summer 2018 (18 June – 21 Sep, 2018)

SYLLABUS Policy Evaluation - 2 credits

Teaching team

Instructor: Edmund J. Malesky, Ph.D. (ejm5@duke.edu). Co-Instructor/Interpreter: Le Viet Phu, Ph.D. (phu.le@fuv.edu.vn)

Visiting Instructor: Cao Hao Thi, Ph.D.

Teaching Assistant: Hoang Van Thang (thang.hoang@fuv.edu.vn)

Class Meeting Time

Lecture Hours: M (1:30 to 3 PM), W (1:30 to 3 PM), F (10:15 to 11:45)

Office Hours: Eddy Malesky (MW, 3 to 4:30 PM)

Le Viet Phu (Thu, 4-5.30 PM)

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
- 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 Handbook.

Course Schedule

Section 1: Fundamentals of Policy Evaluation

Monday, June 18: What is Policy Evaluation?

Importance of evaluation and the difference from monitoring

- KKS, pp 3-20.
- EGAP, "10 Strategies for Figuring Out if X Caused Y"

Wednesday, June 20: What is Causal Inference?

Counterfactuals and the potential outcomes framework

- Angrist and Pishke, Introduction.
- KKS, pp. 20-30.
- EGAP, "10 Things You Need to Know about Causal Inference"

Section 2: Randomized Controlled Trials

Friday, June 22: Introduction to Randomized Controlled Trials (RCTs)

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"

Monday, June 25: Designing and Implementing an RCT:

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

- KKS, pp. 39-50.
- Angrist and Pishke, Chapter 1.
- EGAP, "10 Things to Know about Randomization"

Wednesday, June 27: 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"

Friday, June 29: 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.
- First Problem Set Released

Section 3: Recovering the Experimental Idea through Natural Experiments

Monday, July 2: Introduction to Natural Experiments What do we do when we are unable to randomize?

Wednesday, July 4: Regression Discontinuity Design *Basis assumptions and applications*.

- KKS. 103-112
- Angrist and Pishke, Chapter 4.

Friday, July 6: Case Study: Retirement Age and Tax Incentives in Vietnam. Using a regression discontinuity design to understand why some provinces offer foreign investors more tax incentives than others.

- KKS, 211-216
- First Problem Set Due
- Second Problem Set Released

Monday, July 9: Matching Estimators *Basis assumptions and applications*.

• KKS, pp. 53-64, 181-188

Wednesday, July 11: Difference-in-Differences Analysis *Basis assumptions and applications*.

- KKS, pp. 71-84, 189-201
- Angrist and Pishke, Chapter 5

Friday, July 13: Building a Pre-Analysis Plan

- McKenzie, David. 2012. "<u>A Pre-Analysis Plan Checklist.</u>" World Bank Development Impact Blog.
- Ganiminan, Alejandro. 2017. "<u>Pre-Analysis Plan Template.</u>" Berkeley Initiative for Transparency in the Social Sciences.
 - Second Problem Set Due

Section 4: Survey Experiments

Monday, July 16: Introduction to Survey Experiments *Applying the lessons of RCTs to surveys*.

- EGAP, "10 Things about Survey Design"
- EGAP, "10 Things about Survey Implementation"

Wednesday, July 18: Using Survey Experiments to Gather Sensitive Information

- Stephenson, Matthew. 2017. "Can Indirect Questioning Induce Honest Responses on Bribery Experience Surveys?" Global Anti-Corruption Blog.
- Stephenson, Matthew. 2017. "<u>Using the Unmatched Count Technique (UCT) to Elicit More Accurate Answers on Corruption Experience Surveys</u>," *Global Anti-Corruption Blog*.

Friday, July 20: Case Study: Did the OECD Anti-Bribery Convention Reduce Corruption in Vietnam? *Using specialized survey experiments to measure the frequency of bribery.*

- Jensen, Nathan and Edmund Malesky. 2018. "<u>This is what helps stop big corporations from bribing politicians,</u>" *Washington Post Monkey Cage Blog*.
- One-Page Research Proposal Due

August 1: Pre-Analysis Plan Due