

Course Code: ECON-441

Title: Impact Evaluation Methods

Credit Hours: 03

Prerequisite: Intermediate Microeconomics, Intermediate Macroeconomics, Econometric I & II

Course Objectives:

The course will present an overview of major techniques for impact evaluation and an introduction to the mixed methods approach. In addition, it will be drawing from the good international practices and literature in the field. A dominant feature of empirical research in economics in the past two decades has been the “credibility revolution” in empirical research that has prioritized the generation of credible causal estimates of the impact of policies and programs (Angrist and Pischke, 2010).

Learning Outcomes:

By the completion of the course, students should be able to learn:

- The evidence-based policy and why evaluation of the development projects really important.
- What is inferences and the conditions required to determine causality.
- The main evaluation methods used to examine the impact of policies and the data sets required for each.

Course Contents:

Introduction to Impact Evaluation	What is evidence-based policy making, what is impact evaluation? Impact evaluation for policy decisions, deciding whether to evaluate, cost effectiveness analysis, prospective versus retrospective analysis, efficacy and effectiveness studies, determining evaluation questions,
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	types of evaluation questions, theories of change, the result chain, hypothesis for the evaluation, selecting performance indicator.
Evaluation questions, Causal Inference and Counterfactuals	Causal inference, estimating counterfactual, two counterfeit estimates of the counterfactual
Experimental Designs: Randomized Control Trials	Randomized assignment of the treatment, two variations in the randomized assignment, estimating impact under randomized offering, read a research article that uses randomized control trial and understand its design, the selection problem, how random assignments help in selection problem, regression analysis of experiments.
Quasi - Experimental Designs: Instrumental Variable Technique	Instrumental Variables and causality, Two-Stage Least Squares, Grouped Data and 2SLS, Asymptotic 2SLS Inference, Over-identification, Local Average Treatment Effects, IV in Randomized Trials, Fixed Effects, Random Effects
Quasi - Experimental Designs: Matching Estimation	When is matching estimation used? What are its assumptions? How does it work? Propensity score matching and its various techniques, limitation of matching methods, read papers relevant to propensity score matching and understand their application.
Quasi - Experimental Designs: Difference-in-Difference (DD)	How is DD helpful? How does it work? Limitation of DD method, read papers relevant of difference-in-difference and understand their application.
Quasi - Experimental Designs: Regression Discontinuity (RD)	How is RD helpful? How does it work? Limitation of RD method, read papers relevant to regression discontinuity and understand their application.
Operationalizing Impact Evaluation	Choosing Evaluation Method, determine if evaluation ethical? How to set up the evaluation? How to time and budget the evaluation? What kinds of Data is required? Power Calculations Sampling Strategy? Developing and testing Questionnaires, Conducting Fieldworks, Processing and Validating Data.

Teaching Methodology:

- To deliver lectures on topics included in course outline
- To require each student to solve independent assignments on topics included in the course.

Evaluation Criteria:

Evaluation Method	
Quizzes/Assignments	
Mid-Term Exam	
Final-Term Exam	

Recommended Books:

- P. Gertler, S. Martinez, P. Premand, L. Rawlings, and C. Vermeersch, *Impact Evaluation in Practice*, The World Bank, 2016.
- J. Angrist and J. Pischke, *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton University Press, 2009.

Recommended Research Articles:

- Dehejia, R. H., & Wahba, S. (2002). Propensity score-matching methods for nonexperimental causal studies.
- Finklestein, et al. (2012) The Oregon Health Insurance Experiment: Evidence from the First Year.
- Madestam et al. (2013). Do political protests matter? Evidence from the Tea Party Movement.
- Crepon, et al. (2013). Do labor market policies have displacement effects? Evidence from clustered randomized experiment.
- Clampet- Lundquirt, et al. (2006) Moving At-Risk Youth Out of High-Risk Neighborhoods: Why do Girls Fare Better than Boys?
- Card, D. (1990) The Impact of the Mariel Boatlift on the Miami Labor Market.
- Cohodes, S. & Goodman, J. (2014). Merit Aid, College Quality, and College Completion.