

ESCUELA DE VERANO 2017

Salón: PTE

Fechas: 24 de julio al 4 de agosto (No incluye clases los sábados)

Horario: 10:00 am - 11:50 am clase teórica
12:00 pm – 1:00 pm clase práctica

Idioma: Inglés

Programa sujeto a cambios

OBJETIVO

In this course, we will look at impact evaluation, mainly of policy interventions. We will discuss the desirability of evaluations and the main conceptual problems in identifying the causal impact of policy interventions. We will discuss different econometric techniques that have been proposed in the literature to deal with these issues relating them to the economics behind the evaluation problem. In particular, we will discuss critically: Randomized Controlled Trials, Propensity Score Matching, Regression Discontinuity Design, Difference in Difference Methods, Instrumental Variables and Control Functions, Structural Models. There will be a number of applications that will illustrate the techniques discussed and some practical exercises. The focus will be on applications in Colombia and Latin America.

Prerequisite knowledge: Basic econometrics (Ordinary Least Squared Method) and knowledge of STATA

Learning outcomes:

- Learn methods for estimating causal effects using experimental and observational data
- Understand the assumptions of common methods for impact evaluation;
- Demonstrate a sound understanding of the advantages and limitations of policy impact evaluation methods
- Interpret and critically analyse studies applying methods of impact evaluation.

SYLLABUS

Week 1:

The experimental design for evaluating policy impacts (RCT)

- i) Experimentation and the potential outcome framework
- ii) Threats to selection bias and causal inference

Alternatives to the random allocation of treatment

- i) Propensity Score Matching
- ii) Difference-in-Difference
- iii) Regression Discontinuity Design

Week 2:

Alternatives and complements to the random allocation of treatment

- iv) Instrumental Variables in Policy Evaluation

Unpacking the “black box” of causal impact:

- i) Mediation analysis
- ii) Structural modelling

What can we learn from policy evaluation?

The political economy of evaluation

Tutorials:

The tutorials are generally hands-on lab sessions using STATA, followed by a group discussion. In these sessions, students have an opportunity to reproduce parts of empirical papers using the method taught in the previous day’s lecture. The tutorials’ discussions focus on the interpretation of the results, and are opportunities to reflect upon the strengths and limitations of each method.

Week 1

Tutorial 1: Group discussion - analysis of an impact evaluation application, its strengths and weaknesses. Duflo, E., Hanna, R., & Ryan, S. P. (2012). Incentives Work: Getting Teachers to Come to School. *American Economic Review*, 102(4), 1241-78.

Tutorial 2: Lab application on RCTs.

Tutorial 3: Lab application on cluster RCTs.

Tutorial 4: Lab application on Propensity Score Matching.

Tutorial 5: Lab application on Difference-in-Difference.

Week 2

Tutorial 6: Lab application on Regression Discontinuity Design.

Tutorial 7: Lab application on Instrumental Variables.

Tutorial 8: Lab application on mediation analysis.

Tutorial 9: Lab application on structural modelling.

Tutorial 10: Group discussion – Can governments make better policies as a result of policy evaluation? - and exam feedback

Deaton, A. and Cartwright, N., 2016. *Understanding and misunderstanding randomized controlled trials* (No. w22595). National Bureau of Economic Research.

Textbooks:

There is no single textbook for the course. We will base our lectures on the following mostly on the following two textbooks and add examples from journal articles. Some of these articles are listed in the tutorial material. Students are encouraged to read the original articles:

- Joshua Angrist and Jörn-Steffen Pischke (2009), '*Mostly harmless econometrics*', Princeton University press.
- Alan Gerber & Donald Green (2012) 'Field experiments' W.W. Norton & Company.
- Gertler, P. J., Martinez, S., Premand, P., Rawlings, L. B., & Vermeersch, C. M. (2016). *Impact evaluation in practice*. World Bank Publications.
- Bernal, R., & Peña, X. (2011). *Guía práctica para la evaluación de impacto: Guía práctica para la evaluación de impacto*. Universidad de Los Andes, Colombia.
<http://www.jstor.org/stable/10.7440/j.ctt1b3t82z>

EVALUACIÓN:

The course is assessed by a 2 hours written examination on the last day of the course. The exam consists of two parts. Part A includes exercises and problems where students need to show their understanding of the methods covered during the course. Part B focuses on the interpretation of results of empirical papers.

Assessment criteria:

- i) Your understanding of the methodological assumptions. This means we assess your ability to evaluate key issues and evidence of critical approach to the evaluation question you are asked to address.
- ii) Depth of analysis: this means we assess your ability to interpret evidence from impact evaluation studies, assess the evidence strengths and ability to make informed judgments.

FECHA DE RETIRO:

The student may withdraw the course, without refund, up to one business day before the date of the final test stipulated by the teacher. The University will not return the money for tuition payed for these summer courses