

# Introduction to Causal Inference

Universidad católica del Uruguay

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This course provides an introduction to causal inference using non-structural methods. The topics covered include Randomized Control Trials, Ordinary Least Squares (OLS), Instrumental Variables (IV), Panel Data, Synthetic Control Methods, Regression Discontinuity Designs, and inference for clustered samples.

## **Textbook:**

J. Angrist and JS Pischke (2009): Mostly Harmless Econometrics: An Empiricist's Companion, Princeton University Press. (A&P).

Lecture 1: Experiments and Regression

A&P chapters 1-3.

Busso, M. and S. Galiani (2019): “The causal effect of competition on prices and quality: Field experimental evidence”, **American Economic Journal: Applied Economics**.

Galiani, S. and E. Schargrotsky (2010): “Property rights for the poor: Effects of land titling”, **Journal of Public Economics**.

## Lecture 2: Instrumental Variables

A&P chapter 4.

Galiani, S., M. Rossi and E. Schargrotsky (2011): “Conscription and Crime: Evidence from the Argentine Draft Lottery”, **American Economic Journal: Applied Economics**.

## Lecture 3: Regression Discontinuity Designs

A&P chapter 6.

Galiani, S. and P. McEwan (2013): “Experimental heterogeneous effects in conditional cash transfers”, **Journal of Public Economics**.

## Lecture 4: Panel Data and Synthetic Control Methods

A&P chapter 5.

Galiani, S., P. Gertler and E. Schargrotsky (2005): “Water for life: The impact of the privatization of water supply on child mortality”, **Journal of Political Economy**.

Cavallo, E., S. Galiani, I. Noy and J. Pantano (2013): “Natural disasters and economic growth”, **Review of Economics and Statistics**.

## Lecture 5: Non-Standard Errors

A&P chapter 8.