

PhD in Business Administration and Quantitative Methods
Universidad Carlos III de Madrid
Research Methods 2012-2013

Instructor: Manuel Bagues, Office: 7.0.17, Email:mfbagues(at)emp.uc3m.es

Schedule: MW 9:30 - 11:30 AM, Room: 11.0.17

Course Objectives: The course introduces PhD students to the main empirical strategies for causal inference. It has a practical flavor \Rightarrow emphasis is not on proofs but on intuitions and on applications. I will presume that you already know basic Econometrics and Statistics.

Course material: Slides and suggested readings are available through the intranet. The following textbooks are also highly recommended, particularly the first one:

- Angrist, J. and J.S. Pischke (2009), *Mostly Harmless Econometrics*, Princeton University Press.
- Hayashi, F. (2000), *Econometrics*, Princeton University Press.
- Wooldridge, J. (2002), *Econometric Analysis of Cross Section and Panel Data*, MIT Press.
- Wooldridge, J. (2003), *Introductory Econometrics: A Modern Approach*. South-Western College Publishing.

Course Outline:

1. Introduction
 - (a) Questions about questions
 - (b) The experimental ideal
2. Making regression make sense
3. Instrumental variables in action
4. Differences-in-differences
5. Regression discontinuity designs
6. Non-standard Standard error issues

Software requirements: We will use STATA for exercises and take-home assignment.

Grade Policy: Midterm (25 per cent) and final exam (75 per cent). Participation in class is highly encouraged