

# 31E00910

## Applied Microeconometrics I

### Fall 2016

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Instructors contact information	Course information
Instructor: <b>Manuel Bagues</b> E-mail: manuel.bagues@aalto.fi Office: Economicum, A-219 Teaching assistant: <b>Maryna Tverdostup</b> E-mail: maryna.tverdostup@aalto.fi Office: Economicum, B-406	MSc in Economics, Aalto University Location: Main Building, A-304 Language of Instruction: English Course Website: <a href="https://mycourses.aalto.fi/course/view.php?id=12494">https://mycourses.aalto.fi/course/view.php?id=12494</a>

#### 1. OVERVIEW

The course introduces students to the main empirical strategies for causal inference. It has a practical flavor, emphasis is not on proofs but on intuitions and on applications. The course covers identification based on observables, randomized control trials, difference-in-differences, instrumental variables and regression discontinuity design. The students will also use an econometric software in the analysis of data and estimations.

#### 2. PREREQUISITES

Empirical Methods for Economists (31C01200), Econometrics (30C00200) or Capstone course Econometrics and Data Analysis (31C99904)

#### 3. ASSESSMENT AND GRADING

There will be five graded problem sets. The final grade will be based on these problem sets (50%), and a final exam (50%).

#### 4. READINGS

Many of the topics that will be discussed in the course are addressed in the following textbooks:

Angrist, Joshua D. and Jörn-Steffen Pischke (2014), "Mastering 'Metrics': The Path from Cause to Effect," Princeton, NJ: Princeton University Press.

Angrist, Joshua D. and Jörn-Steffen Pischke (2009), "Mostly harmless econometrics: An empiricist's companion," Princeton, NJ: Princeton University Press.

In addition to that, in each lecture we will also discuss particular academic papers, which will be listed in the lecture slides. All material will be posted at the Course Web Page.

## 5. PRELIMINARY SCHEDULE

Please note that the dates on which material will be covered are approximate. Topics may take more or less time than I anticipate.

Session	Date	Topic	Assignments Due Date
1	Mon 31/11	Introduction	
2	Wed 2/11	Randomized Controlled Trials	PS1: Tue 8/11, 22:00
3	<b>Frid 4/11</b>	<b>Introduction to STATA</b>	
4	Mon 7/11	Regression based on observables	
5	Thur 10/11	Regression based on observables	PS2: Tue 15/11, 22:00
6	<b>Frid 11/11</b>	<b>Problem set 1</b>	
7	Mon 14/11	Instrumental variables	
8	Wed 16 /11	Instrumental variables	PS3: Tue 22/11, 22:00
9	<b>Frid 18/11</b>	<b>Problem set 2</b>	
10	Mon 21/11	Differences in differences	
11	Wed 23/11	Differences in differences	PS4: Tue 29/11, 22:00
12	<b>Frid 25/11</b>	<b>Problem set 3</b>	
13	Mon 28/11	Regression discontinuity design	
14	Wed 30/11	Regression discontinuity design	PS5: Tue 6/12, 22:00
15	<b>Frid 2/12</b>	<b>Problem set 4</b>	
16	Mon 5/12	Other topics	
17	Wed 7/12	Other topics	
18	<b>Frid 9/12</b>	<b>Problem set 5</b>	

## 6. ETHICAL RULES

Aalto University Code of Academic Integrity and Handling Thereof:

<https://into.aalto.fi/pages/viewpage.action?pageId=3772443>