

31E00910

Applied Microeconometrics I

Fall 2017

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Instructors contact information	Course information
Instructor: Manuel Bagues E-mail: manuel.bagues@aalto.fi Office: Economicum, A-219 Teaching assistants: Ramin Izadi & Tolga Benzer E-mails: ramin.izadi@aalto.fi, tolga.benzer@aalto.fi Office: Economicum, A-408	MSc in Economics, Aalto University Location: Main Building, A-304 Language of Instruction: English Course Website: https://mycourses.aalto.fi/course/view.php?id=12494

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 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%). To pass the course a passing grade in the exam is required.

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. TENTATIVE SCHEDULE

Please note that the dates on which the material will be covered are approximate. Topics may take more or less time than I anticipate. Problem sets will involve the use of some statistical package. If you are not familiar with Stata or R, you may want to attend any of the two tutorials that will be offered the second week in the computer lab (room C-250). It is up to you whether you want to use either Stata or R.

Session	Date	Topic	Assignments Due Date
1	Tue 12/09; 13:15	Introduction	
2	Wed 13/09; 15:15	Randomized Controlled Trials	
3	Fri 15/09; 10:15*	Randomized Controlled Trials	PS1: Fri 22/09, 22:00
4	Tue 19/09; 13:15	Regression based on observables	
extra	Tue 19/09; 15:15*	Introduction to STATA	
5	Wed 20/09; 15:15	Regression based on observables	
6	Thu 21/09; 13:15	Regression based on observables	PS2: Fri 29/09, 22:00
extra	Thu 21/09; 15:15*	Introduction to R	
7	Tue 26/09; 13:15	Problem set 1	
8	Wed 27 /09; 15:15	Instrumental variables	
9	Fri 29/09; 10:15*	Instrumental variables	PS3: Fri 6/10, 22:00
10	Tue 3/10; 13:15	Problem set 2	
11	Wed 4/10; 15:15	Differences in differences	
12	Thu 5/10; 13:15	Differences in differences	PS4: Fri 13/10, 22:00
13	Tue 10/10; 13:15	Problem set 3	
14	Wed 11/10; 15:15	Regression discontinuity design	
15	Thu 12/10; 13:15	Regression discontinuity design	PS5: Fri 20/10, 22:00
16	Tue 17/10; 13:15	Problem set 4	
17	Wed 18/10; 15:15	Other topics	
18	Thu 19/10; 13:15	Other topics	

Notes: * denotes exceptional time schedule. The introductory lectures to Stata and R will take place in the computer room (main building, room C-250)

6. ETHICAL RULES

Aalto University Code of Academic Integrity and Handling Thereof:

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