

## SUBJECT TEACHING GUIDE

M193 - Methods and Tools for Public Policy assessment

Master's Degree in Economics: Instruments of Economic Analysis

Academic year 2020-2021

1. IDENTIFYING DATA					
Degree	Master's Degree in Economics: Instruments of Economic Analysis			Type and Year	Optional. Year 1
Faculty	Faculty of Economics and Business Studies				
Discipline	Optional Subjects Module				
Course unit title and code	M193 - Methods and Tools for Public Policy assessment				
Number of ECTS credits allocated	3	Term	Semester based (1)		
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. ECONOMIA				
Name of lecturer	MARTA PASCUAL SAEZ				
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Other lecturers					

### 3.1 LEARNING OUTCOMES

- Provide students with the theoretical knowledge and basic methodological tools for the analysis and evaluation of different public policies.

#### 4. OBJECTIVES

Apply econometric tools for the evaluation of public policies in different fields of the economy.

Understand the basic concepts of the empirical analysis of the evaluation of public policies, in particular causality.

Study the models proposed to collect causal relationships, understand the established hypotheses and the methods of adequate estimate.

Use statistical-econometric software to estimate and evaluate econometric models, as well as to test hypotheses of interest in policy evaluation.

Interpret and critically evaluate the results of the empirical analysis.

#### 6. COURSE ORGANIZATION

##### CONTENTS

1	The problem of evaluation of public policies.
1.1	Potential outcomes and causality. Alternative views on causality.
1.2	Inference in randomized experiments: Fisher's tests of sharp null hypotheses; Neyman's repeated sampling approach; Prediction-based inference in randomized experiments.
1.3	Unconfoundedness with a Single Covariate. Efficiency Bounds for Average Treatment Effects under Unconfoundedness
2	Techniques for evaluating public policies.
2.1	Matching: Basics and Formal Properties of Matching Estimators.
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2.2	Propensity Score Methods: Blocking and Matching on the Propensity Score; Weighting; Optimally Trimming the Sample
2.3	Instrumental Variables: One-sided Noncompliance; Two-sided Noncompliance
2.4	Causal Effects and Social Interactions. Graphical Models.
2.5	Multivalued and Continuous Treatments under Unconfoundedness
2.6	Structural Models in Economics.

### 7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Exam (theoretical and practical issues)	Written exam	No	Yes	30,00
Exercises and Essay	Work	No	Yes	40,00
Oral Presentations	Others	No	No	30,00
TOTAL				100,00
<b>Observations</b>				
The activities of continuous evaluation, problems and work could be carried out in an online format when sanitary circumstances so require.				
<b>Observations for part-time students</b>				
Part-time students will take a single written exam valued out of 10 with all the contents of the subject in the ordinary call. Students who do not pass the subject in the ordinary call must take the extraordinary call, with their grade being obtained in a single written exam valued out of 10 with all the contents of the course.				

### 8. BIBLIOGRAPHY AND TEACHING MATERIALS

#### BASIC

Pearl, J. (2009), Understanding propensity scores. In *Causality: Models, Reasoning, and Inference*, Cambridge University Press, Second Edition.

Wooldridge, J.M. (2001), *Econometric Analysis of Cross Section and Panel Data*. The MIT Press. Cambridge, Massachusetts.