



Universidad
Carlos III de Madrid

COURSE: Government Policy Evaluation

DEGREE: Doble Grado en Derecho y Economía

YEAR: 4

TERM: 2

WEEKLY PROGRAMMING

WEEK	SESSION	DESCRIPTION	GROUPS		Special room for session (computer classroom, audio-visual classroom...)	WEEKLY PROGRAMMING FOR STUDENT		
			LECTURES	SEMINAR		DESCRIPTION	CLASS HOURS	HOMEWORK HOURS Maximum 7 H
1	1	Topic 1 (Introduction and Motivation): Definitions of treatment effects and causality. Problems in the identification and estimation of treatment effects, and their relationship to traditional econometric techniques.	X			Read MHE, Chapter 1	1,5	2,5
2	2	Topic 2 (Experiments): The advantages of randomization and how it enables the estimation of treatment effects. Verify successful randomization, heterogeneous treatment effects. Limitations of randomized experiments.	X			Read MHE, Chapter 2	1,5	5
2	3	Introduction to Stata.		X	X	Train Stata. Solve and discuss the problem set and other assigned work.	1,5	
3	4	Topic 3 (Natural experiments): Exploit natural events or policy changes to identify the effect of treatment on the treated. The Difference-in-Differences Estimator.	X			MHE, Chapter 3.1	1,5	

3	5	Introduction to Stata. Problem Set 1.		X	X	Solve and discuss the problem set and other assigned work.	1,5	5
4	6	Topic 3 (Natural experiments): The Difference-in-Differences Estimator. Common or varying trends; additional regressors.	X			MHE, Chapters 3.1 and 3.2	1,5	5
4	7	Problem Set 1		X		Solve and discuss the problem set and other assigned work.	1,5	
5	8	Topic 4 (Matching): Exogeneity, matching and multiple regression. Extrapolation. Matching based on the probability to be treated (Propensity Score Matching).	X			MHE, Chapter 3.3 (skip pp. 74-79)	1,5	5
5	9	Problem Set 2		X		Solve and discuss the problem set and other assigned work.	1,5	
6	10	Topic 4 (Matching): Exogeneity, matching and multiple regression. Extrapolation. Matching based on the probability to be treated (Propensity Score Matching).	X			MHE, Chapter 3.3 (skip pp. 74-79)	1.5	5
6	11	Problem Set 2		X		Solve and discuss the problem set and other assigned work.	1,5	
7	12	Topic 5 (Instrumental variables): Wald estimator. Interpretation of the IV estimator with homogeneous or heterogeneous treatment effects.	X			Revise IV estimator with homogenous treatment effects. MHE Chapters 4.1-4.1.2.	1,5	5
7	13	Problem Set 3		X		Solve and discuss the problem set and other assigned work.	1,5	

8	14	Topic 5 (Instrumental variables): eligibility rule; the local average treatment effect (LATE); monotonicity condition. Limitations. Marginal Treatment Effects (if time allows).	X			MHE, Chapters 4.4-4.4.3	1,5	5
8	15	Problem Set 3		X		Solve and discuss the problem set and other assigned work.	1,5	
9	16	Topic 5 (Instrumental variables): Two-stage least square estimator. Extensions.	X			MHE, Chapters 4.4, 4.6.1	1.5	5
9	17	EXAM based on Topics 1, 2, 3 and 4 and Problem Sets 1, 2 and 3		X			1,5	
10	18	Topic 6 (Regression Discontinuity): Sharp and fuzzy regression discontinuity (RD) designs. Continuity in potential outcomes and testable implications.	X			MHE, Chapter 6	1,5	5
10	19	Problem Set 4		X		Solve and discuss the problem set and other assigned work.	1,5	
11	20	Topic 6 (Regression Discontinuity): The interpretation and estimation of fuzzy regression discontinuity designs by IV estimator. Parametric and non-parametric implementation. Local linear regression.	X			MHE, Chapter 6	1,5	5
11	21	Problem Set 4		X		Solve and discuss the problem set and other assigned work.	1,5	
12	22	Topic 7 (Structural Models): Advantages and Disadvantages of atheoretical vs. structural approaches. The estimation of structural models. Dynamic models (if time allows). General equilibrium effects (if time allows).	X			Read: tba	1,5	5

12	23	Problem Set 5		X		Solve and discuss the problem set and other assigned work.	1,5	
13	24	Time for group projects.	X				1,5	5
13	25	Problem Set 5.		X		Solve and discuss the problem set and other assigned work.	1,5	
14	26	Time for group projects.	X				1,5	5
14	27	Revision		X			1,5	
15	28	EXAM based on Topics 5, 6 and 7 and Problem Sets 4 and 5		X			1,5	2,5
SUBTOTAL							110	
15		Tutorials, revision, etc					8	
16-18		Exam preparation and assessment					3	19
TOTAL							140	