

SUBJECT TEACHING GUIDE

G944 - Applied Econometrics

DOUBLE DEGREE IN ADMINISTRATION AND BUSINESS MANAGEMENT AND ECONOMICS

Degree in Economics
Academic year 2023-2024

1. IDENTIFYING DATA					
Degree	DOUBLE DEGREE IN ADMINISTRATION AND BUSINESS MANAGEMENT AND ECONOMICS			Type and Year	Compulsory. Year 5 Compulsory. Year 4
Faculty	Faculty of Economics and Business Studies				
Discipline	Subject Area: Econometric Methods Module: Training in Quantitative Methods				
Course unit title and code	G944 - Applied Econometrics				
Number of ECTS credits allocated	6	Term	Semester based (1)		
Web	http://moodle.unican.es				
Language of instruction	Spanish	English Friendly	Yes	Mode of delivery	Face-to-face

Department	DPTO. ECONOMIA				
Name of lecturer	JOSE LUIS GALLEGO GOMEZ				
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Other lecturers	NAMKEE AHN JUNG				

3.1 LEARNING OUTCOMES

- To get familiar with the stylized facts of both time series and cross section data.
- To learn the art of building macro- and micro-econometric models.
- To know how to use macro- and micro-econometric models to contribute to planning and decision taking.
- To gain skills to manage econometric software.

4. OBJECTIVES

To train students to understand, build and use macro- and micro-econometric models.

6. COURSE ORGANIZATION	
CONTENTS	
1	Microeconometrics
1.1	Binary response models. Linear probability model. Logit and Probit models: specification, estimation, hypothesis testing, goodness of fit, prediction and interpretation. Applications.
1.2	Multiple response models. Ordinal outcomes. Ordered logit and probit models: specification, estimation, hypothesis testing, goodness of fit, prediction and interpretation, the parallel regression assumption. Nominal outcomes. Multinomial and conditional logit models: independence of irrelevant alternatives.
2	Macroeconometrics
2.1	Time series regression. Stationary and non-stationary models. Spurious regressions. Unit root test. Cointegration. Error correction model. Applications.
2.2	Vector autoregressive models. VAR and VEC models: specification, estimation, diagnosis and uses. Testing for multivariate cointegration. Identification problem.

7. ASSESSMENT METHODS AND CRITERIA				
Description	Type	Final Eval.	Reassessn	%
Microeconometrics	Laboratory evaluation	No	Yes	50,00
Macroeconometrics	Laboratory evaluation	No	Yes	50,00
TOTAL				100,00
Observations				
<p>The exam of each continuous assessment test will consist of developing an empirical application with R / RStudio and solving theoretical-practical questions about it.</p> <p>Each of the two continuous evaluation exams will be scored from 0 to 10. A minimum grade of 4 is required in each exam to calculate the arithmetic mean of the two grades. Under this requirement, the course is passed with a final grade equal to or greater than 5. Students who obtain a grade lower than 4 in a exam can retrieve it by doing to the corresponding exam of the ordinary call.</p> <p>The type of exam in the ordinary and extraordinary calls will be similar to those of the continuous evaluation. In each call there will be a Microeconometrics exam and a Macroeconometrics exam.</p> <p>Students who want to improve their continuous assessment grades can apply to the ordinary call without penalty, keeping the highest grade.</p> <p>Students who do not pass the subject in the ordinary call will be examined in the extraordinary call of the part in which they have had a grade lower than 4.</p> <p>In the event that the competent health and educational authorities indicate that the evaluation must be done online, each continuous evaluation or recovery exam will be divided into four 30-minute parts that, after consulting the class, can be carried out sequentially in one or more days .</p>				
Observations for part-time students				
<p>Although it is highly recommended to attend the theoretical and practical classes, attendance is not compulsory, so that part-time students can present themselves, if they wish, to continuous assessment controls (one or both).</p> <p>The evaluation method is identical to that described for full-time students and will be graded form 0 to 10.</p>				

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

Stock, J.H., Watson, M.W. (2019) Introduction to Econometrics, 4th ed., Pearson Education.

Gallego, J.L. (2021) Apuntes de Econometría Aplicada. Departamento de Economía, Universidad de Cantabria (moodle.unican.es).