

## 1. OVERVIEW

<b>Subject area</b>	Econometrics
<b>Degree</b>	Bachelor's Degree in Business Administration and Management
<b>School/Faculty</b>	SOCIAL SCIENCE AND COMMUNICATION
<b>Year</b>	Third
<b>ECTS</b>	6 ECTS
<b>Type</b>	Compulsory
<b>Language(s)</b>	Spanish/English
<b>Delivery mode</b>	On campus/Online
<b>Semester</b>	Second semester
<b>Year</b>	2023/2024
<b>Coordinating professor</b>	Almudena Briones

## 2. INTRODUCTION

Econometrics is a compulsory subject area within the Bachelor's Degree in Business Administration and Management, worth 6 ECTS credits. This subject area is part of the quantitative tools module and is taught in the second semester of the third year of the degree. Like the rest of the subjects in the same area of knowledge, Econometrics plays an important role within the analysis of the business environment in particular, as it is an indispensable tool for decision making. Econometrics allows us to objectively analyse and quantify the key factors of business activity and the economic environment in which companies and consumers operate

## 3. LEARNING OUTCOMES

### **Knowledge (CON, by the acronym in Spanish):**

CON4. Identify concepts and tools from mathematics, statistics and econometrics that enable better analysis of economic and business variables and a better understanding of business decisions and problems.

- Identify the behaviour of economic relationships.

### **Abilities (HAB, by the acronym in Spanish):**

HAB1. Critically analyse concepts and theories of business management, interpreting economic, tax, financial and legal data with regard to organisations.

- Analyse reports relating the main economic and financial variables by means of econometric techniques.

HAB2. Solve problems and practical cases using mathematical and data analysis techniques and tools to solve economic issues. Use basic calculus, algebra and programming methods to gain a better understanding of the operational functioning of the company and its environment.

- Decision making in the business environment based on the analysis of data and economic and financial forecasting methods.

**Skills (COMP, by the acronym in Spanish):**

COMP04. Analyse, integrate and assess the legal, sociocultural and economic information needed in different decision-making processes.

## 4. CONTENTS

The subject area is organised into several learning units with theoretical and practical content, which are further divided into several topics.

1. Introduction to econometrics.
2. The general linear model.
3. Goodness of fit and statistical hypothesis testing.
4. Qualitative independent variables.
5. Multicollinearity.
6. Heteroscedasticity.
7. Autocorrelation.

## 5. TEACHING/LEARNING METHODS

The types of teaching-learning methods are as follows:

**On campus mode:**

- Case studies
- Collaborative learning
- Project-based learning
- Lectures

**Online mode:**

- Case studies
- Collaborative learning
- Project-based learning
- Lectures via online seminars

## 6. LEARNING ACTIVITIES

The types of learning activities, plus the amount of time spent on each activity, are as follows:

**On campus mode:**

Learning activity	Number of hours
Lectures	40h
Independent working	10h
Oral presentations	5h
Case studies and problem solving	15h
Group work	35h
Knowledge tests	10h
Tutorials	15h
Projects	20h
<b>TOTAL</b>	<b>150h</b>

**Online mode:**

Learning activity	Number of hours
Online seminars	5h
Reading course material and consulting complementary resources	22,5h
Individual applied activities: problems, case studies, projects	35h
Collaborative applied activities	12,5h
Tutorials	17,5h
Self-assessment questionnaires and knowledge tests	7,5h
Autonomous learning	50h
<b>TOTAL</b>	<b>150h</b>

## 7. ASSESSMENT

The assessment systems, plus their weighting in the final grade for the subject area, are as follows:

Assessment system	Weighting
Knowledge test	50%
Case studies, problem solving and project development	20%
Reports and papers	20%

Oral presentations	10%
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On the Virtual Campus, when you open the subject area, you'll find details of your assessment activities, including the submission dates and assessment procedures for each activity.

### 7.1. Ordinary exam period

To pass the subject area in the ordinary exam period, you must achieve a grade of at least 5.0 out of 10.0 as the final grade (weighted average) for the subject area.

In any case, you will need a grade of at least 5.0 in the final test for it to be included in the weighting with the other activities.

Activities submitted after the deadline will not be accepted. In addition, to be eligible for assessment, students must have an attendance record of over 50%. The university regulations will be followed and no form of plagiarism will be accepted.

### 7.2. Extraordinary exam period (resits)

To pass the subject area in the extraordinary exam period (resits), you must obtain a grade of 5.0 or more out of 10.0 in the final grade (weighted average) for the subject area.

In any case, you will need a grade of at least 5.0 in the final test for it to be included in the weighting with the other activities.

On the Virtual Campus, you can find information on the activities that must be carried out in order to rectify all those activities not passed nor submitted in the ordinary exam period.

Activities submitted after the deadline will not be accepted. The university regulations will be followed and no form of plagiarism will be accepted.

## 8. TIMELINE

This section details the timeline and submission dates for the assessment activities in this subject area.

Assessment activities	Date
Activity 1	Weeks 1–2
Activity 2	Weeks 3–6
Activity 3	Weeks 7–9

Activity 4	Weeks 10–11
Activity 5	Weeks 12–14
Activity 6	Weeks 15–17
Activity 7	Week 18

The timeline may be subject to change for logistical reasons related to the activities. Students will be informed of any changes in due time via the appropriate channels.

## 9. BIBLIOGRAPHY

The reference material for the subject area is as follows:

- Wooldridge, J. (2013): “Introducción a la Econometría. Un enfoque moderno. Quinta edición”. Thomson, Madrid.

### Solved exercises bibliography:

- Carrascal, U., González, Y. y Rodríguez, B. (2000): “Análisis Económico con Eviews”. Ed. Rama, Madrid.
- Pena, B. y otros (1999): “Cien Ejercicios de Econometría”. Ed. Pirámide, Madrid.
- PÉREZ, C (2006): Problemas resueltos de Econometría. Thomson, Madrid.
- PÉREZ, C. (2008): Econometría Avanzada. Técnicas y Herramientas. Pearson. Prentice Hall.

### Complementary bibliography:

- Alonso, A.; Fernández, J.; Gallastegui, I. (2005): “Econometría” Pearson Educación, Madrid.
- Greene, W. H. (1999): “Análisis Económico”. Tercera edición. Prentice Hall. Madrid.
- Gujarati, D. N. y Porter, D. C. (2010): “Econometría. Quinta edición”. McGraw-Hill. México D. F.
- Johnston, J. y Dinardo, J. (2001): “Métodos de Econometría” Vicens Vives.
- Matilla García, M., Pérez Pascual, P. y Sanz Carnero, B. (2013): “Econometría y Predicción”. McGraw-Hill, Madrid.
- NOVALES, A. (1997). Econometría (2ª ed.). Madrid: McGraw-Hill.
- Pindyck, R. S. And Rubinfeld, D. L. (2001): “Econometría. Modelos y pronósticos Cuarta edición”. McGraw-Hill, Madrid.
- PULIDO, O. A. (2006). Guía para usuarios de predicciones económicas. Madrid: Ecobook (Editorial del Economista).
- Ramanathan, R. (1998): “Introductory Econometrics with Applications” Dryden Press, USA.
- Schmidt, S. J. (2005): “Econometría”. McGraw-Hill, México, D.F

## 10. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

The Educational Guidance and Diversity Unit (ODI, by the acronym in Spanish) offers support to our students throughout their university experience to help them achieve their academic goals. Our

work also centres around the inclusion of students with special educational needs, accessibility for all on the different university campuses and equal opportunities.

This Unit offers students:

1. Support and follow-up by means of personal counselling and plans for students who need to improve their academic performance.
2. With regard to support for diversity, non-significant curricular adjustments are made, i.e. in terms of methodology and assessment, for those students with special educational needs, thus pursuing equal opportunities for all students.
3. We offer students a variety of extracurricular learning resources for developing different skills to enrich their personal and professional development.
4. Career guidance through the provision of tools and counselling to students with career doubts or who believe they have made a mistake in their choice of qualification.

Students who need educational support can contact us at:

[orientacioneducativa@universidadeuropea.es](mailto:orientacioneducativa@universidadeuropea.es)

## **11. SATISFACTION SURVEYS**

Your opinion matters!

Universidad Europea encourages you to complete our satisfaction surveys to identify strengths and areas for improvement for staff, degree courses and the learning process.

These surveys will be available in the survey area of your virtual campus or by email.

Your opinion is essential to improve the quality of the course.

Many thanks for taking part.