Universidad Zaragoza

Academic Year: 2025/26

27324 - Econometrics

Teaching Plan Information

Academic year: 2025/26
Subject: 27324 - Econometrics
Faculty / School: 109 - Facultad de Economía y Empresa
228 - Facultad de Empresa y Gestión Pública
301 - Facultad de Ciencias Sociales y Humanas
Degree: 448 - Degree in Business Administration and Management
454 - Degree in Business Administration and Management
458 - Degree in Business Administration and Management
ECTS: 6.0
Year: 3
Semester: First semester
Subject type: Compulsory
Module:

1. General information

The objective of the subject is to introduce the student in the management of econometric models to design and solve basic econometric research. For this, it is essential to clearly appreciate the importance of economic data when analysing Economics at any level, as well as the difference between economic and econometric models. The subject has a practical character, so we will use models, case studies and data close to the scope of application of the degree.
These approaches and objectives are aligned with the Sustainable Development Goals (SDGs) of the United Nations' 2030 Agenda (https://www.un.org/sustainabledevelopment/en/), specifically, the activities in the course will contribute to achieving the goals of Quality Education (Goal 4), Gender Equality (Goal 5), Reduced Inequalities (Goal 10), and Responsible Consumption and Production (Goal 12).

2. Learning results

At the end of the course, students must be able to quantify the economic relation between a variable under study and the factors that explain it. They should know how to test hypothesis to validate the model that has been specified and estimated. They must make an adequate use of the results, both about their economic interpretation (through the sign and magnitude of the coefficients), and the prediction for unknown values of the variable of interest. It is also expected that students will be able to use specific software (Gretl) and acquire the necessary computer skills for the estimation, validation and prediction of the General Linear Model.

3. Syllabus

PART I. INTRODUCTION
1. Concept and Aims of Econometrics
PART II. THE GENERAL LINEAR MODEL
2. Specification and Estimation
3. Validation and Prediction
PART III. SOME EXTENSIONS OF THE GENERAL LINEAR MODEL
4. Checking the Essential Part of the Model
5. Checking the Random Part of the Model

4. Academic activities

Lectures: 30 hours
Practice Sessions: 30 hours
Self-Study: 86 hours
Evaluation Exams: 4 hours (2 of them outside class hours)
6 ECTS = 150 hours
The teaching methodology and assessment are expected to be carried out in person but if the health circumstances require it, they will be carried out semi-on-site or online.

5. Assessment system

The course will be evaluated in the first and second attempts through a final exam. However, during the course, there will be two intermediate assessments, which will contribute to the final calification. The first is worth 20%, and the second is worth 40%.
Intermediate Assessments:
The first assessment will include theoretical and/or theoretical-practical questions on the content of topics 1, 2, and 3. It will assess whether the student understands and uses the basic concepts of econometric models. The second assessment will take place in computer labs and will cover the overall practical content of the course.. It will assess the student's ability to use the Gretl software and real datasets, as well as to analyze the results obtained.
Overall Evaluation:

All students who want to pass the course must take the final exam on the dates set by the Faculty.

Evaluation Criteria:
The final mark will be calculated as the maximum of the following two options:
a. Weighting of the two intermediate assessments (20% and 40%) with the final exam (40%).
b. The mark from the final exam (100%).
The two intermediate assessments will be considered (only if they benefit the student) in both attempts during the academic year.

6. Sustainable Development Goals

4 - Quality Education
5 - Gender Equality
12 - Responsible Consumption and Production