30617 - Econometrics

Syllabus Information

Academic year: 2024/25
Subject: 30617 - Econometrics
Faculty / School: 109 - Facultad de Economía y Empresa
Degree: 432 - Joint Law - Business Administration and Management Programme
ECTS: 6.0
Year: 4
Semester: First semester
Subject type: Compulsory
Module:

1. General information

Themain goal of this subject is that the student learns how to use econometric models to design and solve a basic econometric investigation. It is essential that you appreciate the importance of economic data for analyzing the economy, as well as the difference between economic and econometric models. The orientation of the subject is of the practical type, using models, case studies and data close to the field of application of the degree.

These approaches and goals are aligned with the Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 (https://www.un.org/sustainabledevelopment/es/), specifically, the activities planned in the subject will contribute to the achievement of the goals Quality education (goal 4), Gender equality (goal 5), Reduction of inequalities (goal 10), Responsible production and consumption (goal 12).

2. Learning results

It is expected that upon passing the subject the student will be able to quantify the relationship between a variable under study and the factors that explain it. They must know how to use the hypothesis tests to validate the specified and estimated model, and make appropriate use of the results, both in terms of their economic interpretation, through the sign and magnitude of the coefficients, and in the prediction for unknown values of the variable of interest. It is also expected to know how to handle a specific software (Gretl) and to acquire the necessary computer skills for the estimation, contrast, validation and prediction of the General Linear Model.

3. Syllabus

PART I. INTRODUCTION

Unit 1. Concept and role of Econometrics

PART II. THE GENERAL LINEAR MODEL

Unit 2. General Linear Model Specification and Estimation

Unit 3. Validation and prediction

PART III. SOME EXTENSIONS OF THE GENERAL LINEAR MODEL

Unit 4. Checking the systematic part of the model

Unit 5. Checking the random part of the model

4. Academic activities

Master classes: 30 hours

Practical classes: 30 hours

Personal Study: 86 hours

Assessment tests. 4h (2 of them outside class hours)

6 ECTS = 150 hours

In principle, the teaching methodology and its evaluation is planned to be based on face-to-face classes . However, if circumstances so require, they may be carried out online.

5. Assessment system

The subject will be evaluated in first and second summons through a final test. However, during the term will conduct two intermediate tests that are weighted towards the final grade, if that benefits the student. The first is worth 20% and the second 40%.

Intermediate tests

The first test will contain theoretical and/or theoretical-practical questions on the content of units 1, 2 and 3. It will be assessed if the student understands and uses adequately the basic concepts of econometric models. The second test will take place in computer classrooms. It will cover all the practical content of the subject . In this test, the Gretl software and a real database will be used. The use of the Gretl program, databases, as well as the capacity to interpret the results obtainedwill be valued.

Global Assessment

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

Assessment Criteria:

The final grade will be calculated as the maximum between the following two options:

a. Weighting of the two intermediate tests (20% and 40%) with the final test (40%).

b. The final test grade (100%).

The two intermediate tests will be taken into account (only if it benefits the student) in the two calls of the academic year.

6. Sustainable Development Goals

4 - Quality Education