

27629 - Econometrics

Syllabus Information

Academic Year: 2020/21

Subject: 27629 - Econometrics

Faculty / School: 109 - Facultad de Economía y Empresa

Degree: 450 - Degree in Marketing and Market Research

ECTS: 6.0

Year: 3

Semester: Second semester

Subject Type: Compulsory

Module: ---

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The methodology followed in this course is oriented towards achievement of the learning objectives. It favors the understanding of the different econometrics processes. A wide range of teaching and learning tasks are implemented, such as theory sessions, Computer practices, and tutorials.

Students are expected to participate actively in the class throughout the semester.

Classroom materials will be available via Moodle. These include a repository of the lecture notes used in class, the course syllabus, as well as other course-specific learning materials.

Further information regarding the course will be provided on the first day of class.

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The teaching methodology is planned for face-to-face classes. However, if necessary for health reasons, teaching could be delivered on line

4.2.Learning tasks

The course includes 6 ECTS organized according to:

- Theory sessions (3 ECTS): 75 hours.
- Laboratory sessions (3 ECTS): 75 hours.

Theory sessions: lecture notes and a series of problems (and its solutions) will be available for the students. At the end of each topic, some of the problems will be solved in class by the professor and the rest will be done individually..

Computer practices sessions: these 2-hour sessions take place every week. Students are provided with the practical exercises' instructions to be done as well as a theoretical introduction to the session's contents.

4.3.Syllabus

The course will address the following topics:

Theory sessions

Section 1: Introduction

- Topic 1. What is Econometrics?
- Topic 2. Econometrics Models and Method

Section 2: Linear Regression

- Topic 1. Specification and Classical Regression Assumption
- Topic 2. Estimation and Properties
- Topic 3. Interpretation of Ordinary Least Square
- Topic 4. Effect of Data Scaling on OLS Statistic

Section 3: Inference

- Topic 1. Measures for Model Fit
- Topic 2. Test about a single Constraint
- Topic 3. Test about several constraints

Section 4: Model Checking

- Topic 1. Test for Functional Form Misspecification
- Topic 2. Test for Heteroskedasticity.
- Topic 3. Multicollinearity in Regression Models

Section 5: Linear Probability Model

- Topic 1. Specification and Interpretation of LMP
- Topic 2. Main Linear Probability Model Problem.

Section 6: Logistic Probability Model

- Topic 1. Specification and Interpretation of Logit Model
- Topic 2. Criteria for Model Selection.

4.4.Course planning and calendar

For further details concerning the timetable, classroom and further information regarding this course please refer to the "Facultad de Economía y Empresa, Universidad de Zaragoza" website (<https://econz.unizar.es/>).

4.5.Bibliography and recommended resources