27629 - Econometrics

Academic Year	2017/18
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.Introduction

1.2.Recommendations to take this course

1.3.Context and importance of this course in the degree

1.4.Activities and key dates

2.Learning goals

2.1.Learning goals

2.2.Importance of learning goals

3.Aims of the course and competences

3.1.Aims of the course

3.2.Competences

4.Assessment (1st and 2nd call)

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

5.Methodology, learning tasks, syllabus and resources

5.1.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.

5.2.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.

5.3.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. Meassures for Model Fit

Topic 2. Test about a single Constraint

Topic 3. Test about several constraints

Section 4: Model Checking

Topic 1. Test for Misspecification

Topic 2. Test for Structural Stability.

Topic 3. Test for Heteroskedasticity

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.

5.4.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/).

5.5.Bibliography and recommended resources