

Academic Year: ( 2019 / 2020 )

Review date: 30-04-2020

Department assigned to the subject: Social Sciences Department

Coordinating teacher: TORRE FERNANDEZ, MARGARITA

Type: Compulsory ECTS Credits : 6.0

Year : 2 Semester : 2

**REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)**

Basic knowledge of statistics

**OBJECTIVES**

At the end of the course, students must be proficient in the following tasks:

- 1) operationalization of research hypotheses
- 2) handling and preparation of data
- 3) use of the main quantitative techniques in social research:
  - a. Selecting the most appropriate technique for each type of research question and data
  - b. Data Analysis
  - c. Interpretation of the analyses
- 4) a working knowledge of Stata/R and basic programming skills

**DESCRIPTION OF CONTENTS: PROGRAMME**

Quantitative research techniques are a key element in the training of future professionals. This course delves into the learning of quantitative social research techniques from an applied perspective. All topics will be approached in a theoretical/practical way, using the statistical package Stata/R

The course is structured as follows:

1. Introduction to quantitative social research
2. Descriptive Analysis
3. Bivariate analysis
4. Multivariate Analysis:
  - a. Linear Regression
  - b. Logistic Regression
5. Visualización and reporting

**LEARNING ACTIVITIES AND METHODOLOGY**

Master Classes (3 ECTS credits):

Lecture on the theoretical content of the subject.

Reduce Classes (3 ECTS credits):

Practical classes in the computer room using Stata/R.

**ASSESSMENT SYSTEM**

Exercises conducted and evaluated in class, participation in debates and other activities.

Percent of continuous assessment (assignments, labs, etc.): 40%.

Final exam: includes both theory and practice content.

Percent of end-of-term examination: 60%.

<b>% end-of-term-examination:</b>	60
<b>% of continuous assessment (assignments, laboratory, practicals...):</b>	40

**BASIC BIBLIOGRAPHY**

- Cameron, Colin A. & Pravin K. Trivedi Microeconometrics using Stata, Stata Press, 2010
- Long, Scott J. & Jeremy Freese Regression Models for Categorical Dependent Variables Using Stata, Stata Press, 2014

#### ADDITIONAL BIBLIOGRAPHY

- James, Gareth, Daniel Witten, Trevor Hastie, & Robert Tibshirani An introduction to Statistical Learning with applications in R, Springer, 2013