

Academic Year: (2023 / 2024)

Review date: 18-04-2023

Department assigned to the subject: Business Administration Department

Coordinating teacher: MELERO MARTIN, EDUARDO

Type: Compulsory ECTS Credits : 5.0

Year : 1 Semester : 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Statistics, Quantitative Methods I & II

OBJECTIVES

This class introduces students to social science methods as applied to the study of organizational issues, focusing on the key issues of measurement, design, analysis and statistical inference. The goal is for students to develop the skills necessary for conducting empirical research and for critically evaluating research conducted by others.

DESCRIPTION OF CONTENTS: PROGRAMME

CLASS 1: Research Methods. The language of research. Models in Empirical Research.

CLASS 2: Research Design and Basics of Data Analysis. Introduction to STATA program.

CLASS 3: Multiple Regression

CLASS 4: Binary Dependent Variables: Estimating Probabilities

CLASS 5: Quantile Regression

CLASS 6: Endogeneity Problems in Regression Analysis

CLASS 7: Instrumental Variables: Introduction

CLASS 8: Instrumental Variables: Instrument Validity and Strength

CLASS 9 : Instrumental Variables in Practice

CLASS 10: Panel Data Structures

CLASS 11: Panel Data Applications

CLASS 12: Panel Data: Differences-in-Differences Estimator

CLASS 13: Regression Discontinuity

CLASS 14: Carrying Out an Empirical Projects (and reporting results)

LEARNING ACTIVITIES AND METHODOLOGY

Students will be required to hand in 5 assignments dealing with the different topics of the program.

Students will be advised on the use of STATA program for those assignments and are expected to develop the necessary programming skills.

The course also includes a set of readings and discussion papers that the students are expected to read in advance. The professor may explicitly ask students to present these papers in class.

ASSESSMENT SYSTEM

50%: Assignments. Each assignment will consist of a series of exercises, most of them demanding the empirical analysis of a dataset that will be provided together with the questions of the exercise. The assignment must be done in teams of 2 and a PDF document with results reported in Tables (and Figures, if necessary) must be delivered, with proper verbal interpretation. Interpreting correctly results is as important as obtaining them with the proper procedure.

10%: Paper Presentations in teams of 2. Each presentation will take place in the corresponding class schedule for it. It should last about half an hour. Although the papers are not methodology-based papers, there is an intended contribution for the topic in all of them, they are empirical papers where the methods are very important. The paper presentations by the students in this course should be focused in their methods, and provide only a short exposition of the research question addressed in each article for the purpose of context and background.

40%: Final Exam. The exam will involve neither doing regressions nor managing data sets. It will be consist of one or some questions asking the students to interpret and discuss some proposed empirical analysis of a given research question, and/or propose their own approach for that question.

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

BASIC BIBLIOGRAPHY

- Jeffrey M. Wooldridge Introductory Econometrics: A Modern Approach, Thomson South-Western, 2003
- Joshua D. Angrist and Jörn-Steffen Pischke "Mostly Harmless Econometrics", Princeton University Press, 2009