uc3m | Universidad Carlos III de Madrid

Research Methods

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

% end-of-term-examination/test:	40
% of continuous assessment (assigments, laboratory, practicals…):	60

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 bust 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.

% end-of-term-examination/test: 40

% of continuous assessment (assigments, laboratory, practicals…): 60

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.

BASIC BIBLIOGRAPHY

 - Jeffrey M. Wooldridge Introductory Econometrics: A Modern Approach, Thomson South-Western, 2003

 - Joshua D. Angrist and Jörn-Steffen Pischke "Mostly Harmless Econometrics", Pricenton University Press, 2009