

**TEACHING GUIDE
ECONOMETRICS I**

GRADO EN ECONOMÍA (INGLÉS)

ACADEMIC YEAR 2023-24

Date: 08-07-2023

I.-Subject Identification	
Type	OBLIGATORIA
Teaching period	3 course, 1Q semester
Nº of credits	4.5
Language in wich the subject is taught	English

II.-Presentation
<p>Aims: The aim of "Econometrics I" is to provide basic tools to understand the empirical analysis applied to economic problems. We will study the linear regression model (estimation and inference) with special emphasis on its interpretation and application to economic problems.</p> <p>Prerequisite: Good knowledge in Economics and Statistics is highly recommended. Students are advised to review basic statistical concepts. "Aula Virtual" will be used as a tool for teacher-student communication, therefore students are encouraged to check "Aula Virtual" at least once a week.</p>

III.-Competences
<p>Generic competences</p> <p>CT01. Ability to analyse and synthesise CT03. Oral and written communication in native language CT07. Ability to solve problems CT08. Ability to make decisions CT09. Ability to work in a team CT15. Ability to learn independently CT17. Creativity CB01 .That students have demonstrated the possession and comprehension of knowledge in a field of study based on the foundations of general secondary education, at a level that, although supported by advanced textbooks, includes some aspects that imply knowledge proceeding from the forefront of the field of study. CB02 . That students are able to apply their knowledge to their work or vocation in a professional manner and have the skills that are typically demonstrated through the preparation and defense of arguments and problem solving within their field of study. CB03 . That students have the ability to gather and interpret relevant data (usually within their field of study) to express judgments that include a reflection on relevant topics related to social, scientific or ethical areas. CB04 . That students are able to transmit information, ideas, problems and solutions to both specialized and non-specialized audience.</p>
<p>Specific competences</p> <p>CE01. Ability to put knowledge of economics into practice CE02. Information search and research skills CE03. Design and management of projects relating to different areas of economics CE19. Forecasting with different economic variables</p>

IV.-Contents

IV.A.-Syllabus

I.- Introduction

Chapter 1. Introduction: The Nature of Econometrics and Econometric Modelling

The Nature of Econometrics. Economic Data. Econometric models.

II.- Linear Regression Model

Chapter 2. Linear Regression Model: Definition and Interpretation

Definition of a Linear Regression Model. Hypotheses. Interpretation. Non-linear Functional Forms.

Chapter 3. Linear Regression Model: Estimation and Goodness-of-Fit

Ordinary Least Square (OLS) Estimation. Properties of OLS. Goodness-of-Fit.

Chapter 4. Linear Regression Model: Inference

Testing Hypotheses about the parameters. Confidence intervals. Restricted Least Squares

IV.B.-Training activities

Type

Title

Attendance to theoretical classes and tutorials, preparation of classes and tests

Solving exercises of chapters 1,2,3 and 4

V.-Student workload		
Lecture classes	25	
Practical classes/resolution of exercises, case studies, etc.	16	
Practical sessions in technological laboratories, hospitals, etc.	0	
Tests	4	
Academic tutorials	13.5	
Related activities: conferences, seminars, etc.	0	
Preparation of lecture classes	44	
Preparation of practices, exercises, cases studies work	30	
Test preparation	2.5	
Total student workload	135	
VI.-Methodology and academic programme		
Type	Period	Content
Master classes	Week 1 to Week 14	Theoretical classes of Chapter 1,2,3 and 4.
Work placements	Week 1 to Week 14	Practical classes with econometric software and exercises.
Academic Tutorials	Week 1 to Week 14	There will be a follow-up of the student with tutorials

VII.-Assessment methods

VII.A.-Assessment weighting

Continuous ordinary assessment:

The distribution and characteristics of the assessment tests are those described below. Only in exceptional case and for special reasons may the teacher add changes to the Guide. These changes will require the prior consultation with the Subject Head and the prior and explicit authorisation of the Degree Programme Coordinator, who will notify the Vice-Rector's office in charge of Academic Affairs of the modifications made. In any case, the changes proposed must take into account the stipulations of the verified report. In order for these changes to take effect, they must be duly communicated at the start of the course to the students using Aula Virtual.

The combination of activities that are not re-assessable cannot exceed 50% of the subject grade and, in general, cannot have a minimum grade (except for the case of laboratory or clinical work placements, where duly justified), and tests which exceed 60% of the subject weighting cannot be added.

Extraordinary assessment: Students who do not manage to pass the ordinary assessment, or who did not attend, will be subject to completion of an extraordinary assessment to verify their acquisition of the skills established in the guide, only for activities that are re-assessable.

Description of the tests for assessment and their weights.

Regular Evaluation:: If the teacher requires mandatory attendance, it should be precisely specified.

(Note: If a student is not allowed to sit for an exam because he/she has not complied with minimum attendance, this should be justified using a system of proof; for example, a list of signatures on an attendance sheet).

The distribution and characteristics of the assessment tests are the ones described next. The professor, considering the specific characteristics of each group, may announce changes during the first weeks of the course that he or she considers appropriate, previously informing the Vice-rector of Academic Affairs and Organization and Degrees.

Extraordinary Evaluation: Those students who have not succeeded at the ordinary assessment, or have not taken the subject exams, will have to do a make-up exam to verify the acquisition of the tasks set out in the guide.

REGULAR EVALUATION:

There will be two tests carried out throughout the semester.

Test 1: Related to the content of chapters 1 and 2 and held between weeks 6 to 8. Weight in the final grade: 40%. Re evaluable.

Minimum mark: 5

Test 2: Related to the content of chapters 3 and 4 and held at the end of the semester. Weight in the final grade: 60%. Re evaluable. Minimum mark: 5

EXTRAORDINARY EVALUATION:

Students will have a similar test to the one of the regular evaluation, including those parts that they did not pass in the regular evaluation.

VII.B. Assessment of students with an academic exemption

Student who wish to opt for this assessment will have to get an academic exemption for the subject, which they will have to request from the Dean or Director of the Centre which teaches their course. An academic exemption may be granted where the subjects own characteristics allow for it.

Subject with the possibility of an exemption: Yes

VII.C. Review of assessment tests

In accordance with the exam appeal regulations of the Universidad Rey Juan Carlos.

VII.D.-Students with a disability or special educational needs

Curricular adaptations for students with a disability or special educational needs will be determined by the Disabled Students Support Department, in accordance with the regulations governing the Disabled Students Support service, approved by the Universidad Rey Juan Carlos Council, in order to guarantee equal opportunities, inclusive treatment, universal accessibility and a greater guarantee of academic success.

For this purpose, this Department will have to issue a curricular adaptation report, therefore students with disabilities or special educational needs must contact the Department to analyse the different alternatives together.

VII.E.-Academic behaviour, academic integrity and honesty

The Universidad Rey Juan Carlos is completely committed to the highest standards of academic integrity and honesty. Therefore, studying at the URJC means you accept and agree to the academic integrity and honesty values described in the University's Code of Ethics. In order to monitor this procedure, the University has Regulations on academic behaviour at the Universidad Rey Juan Carlos and uses different tools (anti-plagiarism, supervision?) which provides a collective assurance that these essential values are completely developed

VII.-Bibliography	
Referecense Generic	
Title: Introductory Econometrics. A modern approach (7th edition),(2020) Author: Wooldridge, J.M. Publisher: South-Western Cengage Learning	
Title: Introduction to Econometrics, 3rd Edition, 2015 .- Authors: Stock, J.H. and Watson, M.M., Publisher: Pearson,	
Title: Basic Econometrics. 5th Edition (2009), Authors: Damodar N. Gujarati y Dawn C. Porter, Publisher: McGraw Hill.	
Title: Essentials of Econometrics 5th Edition (2021), Authors: Damodar N Gujarati, Publisher: Sage Publications	
Title: Principles of Econometrics (Fifth Edition). (2018), Authors: Hill, C. R.; Griffiths, W.E. y Lim, G.C.. Publisher: John Wiley & Sons Inc.	
Reference literature	

IX.-Lecturers/Teachers/Professors	
Lecturer/teacher/professor´s name	AMADEO FERNANDO NAVARRO ZAPATA
E-mail address	amadeo.navarro@urjc.es
Department/field	Economía Aplicada I e Historia e Instituciones Económicas
Category	Profesor/a Ayudante Doctor/a
Academic qualifications	Doctor
Subject Coordinator	No
Academic tutorial timetable	Para consultar las tutorías póngase en contacto con el/la profesor/-a a través de correo electrónico
Nº of Quinquenios	0
Nº of Sexenio	0
Nº period for technology transfer	0
Stretch Docentia	0