Universidad Rey Juan Carlos

TEACHING GUIDE

ECONOMETRICS I

GRADO EN ECONOMÍA (INGLÉS)

ACADEMIC YEAR 2026-27

Q2803011B UNIVERSIDAD REY JUAN CARLOS
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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

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.
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.

III.-Learning outcomes

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.
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

- Key for degrees not adapted to RD 822/21: **CB** - basic competences, **CG** - generic competences, **CE** - specific competences, **CT** - transversal competences.
- Key for degrees adapted to RD 822/21: **CON** - knowledge, **COM** - competences, **HAB** - skills.

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
Resolution of exercises, problems, case studies	Theoretical and practical exercises covering all topics.
Academic tutorials	Tutorials on theory, exercises, and practical work.
Practical sessions	Computer exercises with Econometric software
Theoretical sessions	Attendance at lectures and preparation for classes and exams.
Test and/or exams	Assessments derived from the theoretical and practical components of the curriculum.

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V.-Student workload	
Theoretical sessions	25
Resolution of exercises, problems, case studies, etc.	16
Practical sessions in experimental, technological and clinical laboratories, fieldwork, etc.	0
Tests and/or exams	4
Academic tutorials	36
Related activities: conferences, seminars, etc.	0
Preparation of theoretical sessions and self-study	34
Preparation of practical tasks, exercises, case studies, projects, etc.	18
Preparation for tests and/or exams	2
Total student workload	135

VI.-Methodology and academic programme

Type	Period	Content
Academic tutorials	Week 1 to Week 15	A follow-up will be conducted with the student through tutorials and any difficulties with the course will be addressed in tutorials.
Theoretical sessions	Week 1 to Week 15	Lectures covering the syllabus
Practical sessions	Week 1 to Week 15	Practical sessions with econometric software and exercises.
Resolution of exercises, problems, case studies	Week 1 to Week 16	Theoretical and practical exercises on all topics

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VII.-Assessment methods

The general assessment method is continuous as established in the *Regulation for the Assessment of Learning Outcomes* of Rey Juan Carlos University.
All the assessment systems established in the degree report must be employed, except for those that have a minimum weight of 0%, which can be used by professors in the academic years they consider relevant. Each assessment system may be applied through one or more assessment activities, consistent with the system. No assessment activity can exceed individually 60% of the overall grade for the subject.
The sum of non re-evaluable activities cannot exceed 40% of the overall grade for the subject and, in general, should not have an established minimum grade (except for practical activities in which, strictly speaking, the conditions of the ordinary call cannot be reproduced in the extraordinary call).
Those students who do not manage to pass the subject in the ordinary call, or do not attend this first call, may attend the extraordinary call only for failed re-evaluable assessment activities.
The distribution and characteristics of the assessment activities are described below.

VII.A.-Description and weight of the assessment activities

ORDINARY CALL:
There will be two exams carried out throughout the semester:
Exam 1: Related to the content of chapters 1 and 2 and held between weeks 6 to 8. Weight in the final grade: 40%. Re-evaluated. Minimum grade: 5
Exam 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-evaluated. Minimum grade: 5
CALCULATION OF THE FINAL OR OVERALL GRADE
At the end of the course, the final grade is calculated as the weighted average of the grades of the evaluation activities according to the indicated percentages, If the minimum grade indicated for each of them has been passed. Considering the above, in order to pass the course, the weighted average cannot be less than 5.
If one or more evaluation activities have not been passed with the minimum grade, the final grade of the course will be the average grade obtained among the evaluation activities carried out, considering that it cannot exceed a 4.9. In the event of exceeding it, the grade will be 4.9.
In case of not having taken any evaluable exam, the grade will be "No presentado" ("Not attended").
EXTRAORDINARY CALL
In the extraordinary call, students will only take the evaluation activities of the exam not passed, thus for the calculation of the final grade in this call will be used the grade of the evaluation activities passed in the ordinary call and the grades obtained in the revaluated activities.
The re-evaluation of the corresponding activities will be carried out on the scheduled date indicated for the extraordinary call. The student will be examined with an exam similar to those of the ordinary evaluation of the part or parts that he/she has not passed in the ordinary evaluation.
EARLY CALL:
- The exam will be held on the official date indicated for the anticipated call. The student will be examined with a test similar to those carried out in the ordinary evaluation and related to the two parts of the subject. The calculation of the final grade is done as indicated in the section on the calculation of the final grade.

VII.B. Assessment of students with academic exemption from class attendance

Having Academic Exemption from Class Attendance (DAAC) does not imply that students are automatically exempt from participating in the continuous assessment activities or in the training activities of compulsory attendance as established in the teaching guide. Once the exemption has been granted, students must contact the subject's teaching staff, who will propose the adaptations he/she may consider relevant, as long as they guarantee the acquisition and adequate assessment of the learning goals established. Students must maintain adequate communication with the teaching staff so that they may provide information on the dates for training and assessment activities, if these are not established in the programme and available for students at the time of achieving the exemption.
Subject with possibility of academic exemption: Yes.

VII.C. Review of assessment activities

In accordance with the Regulation for the Assessment of Learning Outcomes of Rey Juan Carlos University.

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

In order to guarantee equal opportunities, non-discrimination, universal accessibility and academic success, students with disabilities or especial education needs may request curricular adaptations to follow their studies. These adaptations will be provided by the Unit of Attention to People with Disabilities of Rey Juan Carlos University, in accordance with the regulation which regulates the service for the Attention of People with Disabilities at the University. This Unit will issue a report for curricular adaptations, so that students with disabilities or special education needs must contact the service (at e-mail discapacidad.programa@urjc.es) in order to provide relevant information for different educational alternatives.

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

Rey Juan Carlos University is fully committed to the highest standards of academic integrity and honesty, so studying at the URJC means assuming and subscribing to the values of integrity and academic honesty set out in the University's Ethical Code. To support this process, the University has Rey Juan Carlos University's Academic Conduct Regulation as well as different tools (anti-plagiarism, supervision...) that offer a collective guarantee for the full development of these essential values.

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VIII.-Teaching resources and materials
Basic bibliography
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.
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,
Consultation bibliography

IX.-Professors	
Name and surname	AMADEO FERNANDO NAVARRO ZAPATA
E-mail address	amadeo.navarro@urjc.es
Department	Economía Aplicada I e Historia e Instituciones Económicas
Campus	Madrid - Quintana
Category	Profesor/a Ayudante Doctor/a
Academic degree	Doctor
Person responsible for the subject	Yes
Tutorial timetable	Para consultar las tutorias póngase en contacto con el/la profesor/a a través de correo electrónico
Number of quinquennia	1
Number of sexennia	0
No. of positive evaluations by Docentia	1

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