



1. General information

Course: ECONOMETRIC METHODS AND MODELLING
 Type: CORE COURSE
 Degree: 316 - UNDERGRADUATE DEGREE IN ECONOMICS
 Center: 5 - FACULTY OF ECONOMICS AND BUSINESS
 Year: 3

Code: 53322
 ECTS credits: 6
 Academic year: 2019-20
 Group(s): 10 17
 Duration: C2
 Second language: English
 English Friendly: Y
 Bilingual: N

Main language: Spanish

Use of additional languages:
 Web site:

Lecturer: NURIA HUETE ALCOCER - Group(s): 10				
Building/Office	Department	Phone number	Email	Office hours
Facultad de Ciencias Económicas y Empresariales de Albacete Despacho 1.08	ECO .ESP. E INT.,ECONOMET. E Hª E INS.EC	926053550	nuria.huete@uclm.es	Miércoles y Jueves de 10:30 -11:30 h y de 15:30 -17:30 h Mandar antes un email.
Lecturer: VICTOR RAUL LOPEZ RUIZ - Group(s): 10 17				
Building/Office	Department	Phone number	Email	Office hours
Facultad de CC EE y EE / 3.09	ECO .ESP. E INT.,ECONOMET. E Hª E INS.EC	926053659	victor.lopez@uclm.es	Miércoles y jueves (12:00-13:00h) y Viernes (10:00-14:00h).

2. Pre-Requisites

It is recommended to have passed the disciplines of Statistics and Mathematics. Also have completed the previous subject of Introduction to Econometrics.

3. Justification in the curriculum, relation to other subjects and to the profession

The subject of Econometric Methods and Models falls under the third year of the Degree in Economics (fifth course of Double Degree in Economics-Law) and is taught in the second semester after having taken the subject of Introduction to Econometrics, in the first

The main objective of the subject is to provide the fundamental tools for the professional construction of models taking into account the different specific approaches of econometrics in response to complex situations of reality: generalization for the randomization of

On the other hand, the student's ability will be considered both in the management of these instruments and the available data sources, and their ability to make economic reports in groups. Competencies and skills of the economist who must know their reality and

In this way, not only a series of methods and models is disclosed, but also one must teach them to work with them in reality, for which they must be complemented with economic theory and with the necessary quantitative information, hence their relationship with the

4. Degree competences achieved in this course

Course competences

Code	Description
E03	Ability to find economic data and select relevant facts.
E05	Ability to contribute to the establishment of strategies which will allow for the efficient allocation of resources, the generation of wealth and a suitable distribution of income.
E06	Application of professional criteria to the analysis of problems, based on the use of technical tools.
E16	Identify relevant sources of financial information and its content, as well as the ability to derive the important information from the data, otherwise completely unknown to non-professionals.
G01	Possession of the skills needed for continuous, self-led, independent learning, which will allow students to develop the learning abilities needed to undertake further study with a high degree of independence.
G03	Develop oral and written communication skills in order to prepare reports, research projects and business projects and defend them before any commission or group of professionals (specialised or non-specialised) in more than one language, by collecting relevant evidence and interpreting it appropriately so as to reach conclusions.
G04	Ability for the use and development of information and communication technology in the development of professional activity.
G05	Capacity for teamwork, to lead, direct, plan and supervise multidisciplinary and multicultural teams in both national and international environments.

5. Objectives or Learning Outcomes

Course learning outcomes

Description

Enable student for autonomous work and learning, as well as for personal initiative
 Train the student to search for information in order to analyze it, interpret its meaning, synthesize it and communicate it to others.
 Train the student to work out problems in creative and innovative ways.
 Know the tools and methods for the quantitative analysis of the overall economy

Additional outcomes

Train the student to apply quantitative methods as support for decision making in the uncertain environment.

6. Units / Contents

Unit 1: GENERALIZED LINEAR MODEL

- Unit 1.1 EXTENSIONS OF THE LINEAR REGRESSION MODEL
- Unit 1.2 STRUCTURAL CHANGE
- Unit 1.3 AUTOCORRELATION
- Unit 1.4 HETEROCEDASTICITY

Unit 2: DYNAMIC MODELS

- Unit 2.1 DISTRIBUTED LAGS
- Unit 2.2 TIME SERIES MODELS: ARIMA

Unit 3: MULTI EQUATION MODELS

- Unit 3.1 SPECIFICATION, IDENTIFICATION AND ESTIMATION
- Unit 3.2 FORECAST AND SIMULATION

Unit 4: SPECIFIC TOPICS

- Unit 4.1 MACRO-ECONOMETRICS
- Unit 4.2 PANEL DATA MODELS
- Unit 4.3 APPLIED MODELS IN MACROECONOMICS
- Unit 4.4 MANAGEMENT INFORMATION SYSTEMS

7. Activities, Units/Modules and Methodology

Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	R	Description	
Class Attendance (theory) [ON-SITE]	Lectures	E03 E05 E06 E16 G01 G04		1.2	30	Y	N	N	
Class Attendance (practical) [ON-SITE]	Cooperative / Collaborative Learning	E03 E06 E16 G01 G03 G04 G05		0.67	16.75	Y	N	N	
Class Attendance (theory) [ON-SITE]	Combination of methods	E03 E06 E16 G01 G04		0.13	3.25	Y	N	N	
Writing of reports or projects [OFF-SITE]	Group Work	E03 E05 E06 E16 G01 G03 G04 G05		1.2	30	Y	Y	N	
Writing of reports or projects [OFF-SITE]	Case Studies	E05 E06 G01 G03 G04		0.56	14	Y	N	N	
Project or Topic Presentations [ON-SITE]	Combination of methods	G03 G05		0.04	1	Y	N	N	
On-line Activities [OFF-SITE]	Self-study	G01 G03		0.24	6	Y	N	N	
On-line debates and forums [OFF-SITE]	Combination of methods	E06 G01 G03		0.24	6	Y	N	N	
Study and Exam Preparation [OFF-SITE]	Combination of methods	E05 E06 E16 G01 G04		1.6	40	Y	N	Y	
Group tutoring sessions [ON-SITE]	Guided or supervised work	E05 G03 G05		0.04	1	N	-	-	
Final test [ON-SITE]	Assessment tests	E05 E06 E16 G01 G03		0.08	2	Y	Y	Y	
				Total:	6	150			
				Total credits of in-class work: 2.16			Total class time hours: 54		
				Total credits of out of class work: 3.84			Total hours of out of class work: 96		

As: Assessable training activity

Com: Training activity of compulsory overcoming

R: Rescheduling training activity

8. Evaluation criteria and Grading System

Evaluation System	Grading System		Description
	Face-to-Face	Self-Study Student	
Theoretical papers assessment	20.00%	0.00%	Team work on dynamization and / or multi-equation model. Attention will be paid not only to the content, but to the correct use of scientific forms and oral presentation.
Assessment of problem solving and/or case studies	10.00%	0.00%	Individual work. Participation and positive result of the practical sessions, seminars, tutorials, ... It requires a minimum of participation (face-to-face and not face-to-face via the Moodle platform)
Progress Tests	10.00%	0.00%	A progress test similar to the final test will be made.
Final test	60.00%	0.00%	Final objective test divided into two blocks: theoretical and practical that must be overcome.

Total: 100.00% 0.00%

Evaluation criteria for the final exam:

The evaluation is based on a continuous system in which the effort and progress of the student in the development of a series of competences is valued. The progress tests will be made through questions and practical exercises that will be carried out at the mid-end of the semester. Individual work through cases for delivery according to the established legal calendar. The participation and positive result of the practical sessions, seminars, tutorials will be valued. Group work: in the evaluation of this work attention will be paid not only to the content, but to the correct use of scientific forms and oral presentation.

Final test, through the development of two blocks: theoretical questions and practical exercises that will be held on the day set for the final exam. To make the average, in the final exam it is necessary to obtain a minimum score of 4 points out of 10 in one of the parts and five in average.

Specifications for the resit/retake exam:

Must have delivered the Group Work (theoretical work) and made the presentation of it.

Specifications for the second resit / retake exam:

Must have delivered the Group Work (theoretical work) and made the presentation of it.

9. Assignments, course calendar and important dates

Not related to the syllabus/contents

Hours	hours
Project or Topic Presentations [PRESENCIAL][Combination of methods]	1
On-line Activities [AUTÓNOMA][Self-study]	6
Group tutoring sessions [PRESENCIAL][Guided or supervised work]	1
Final test [PRESENCIAL][Assessment tests]	2

Unit 1 (de 4): GENERALIZED LINEAR MODEL

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	8
Class Attendance (practical) [PRESENCIAL][Cooperative / Collaborative Learning]	3.75
Class Attendance (theory) [PRESENCIAL][Combination of methods]	1.25
Writing of reports or projects [AUTÓNOMA][Group Work]	8
Writing of reports or projects [AUTÓNOMA][Case Studies]	3
On-line debates and forums [AUTÓNOMA][Combination of methods]	1
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	12

Group 10:
Initial date: 27-01-2020 **End date:** 01-03-2020

Group 17:
Initial date: 27-01-2020 **End date:** 01-03-2020

Unit 2 (de 4): DYNAMIC MODELS

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	9
Class Attendance (practical) [PRESENCIAL][Cooperative / Collaborative Learning]	6
Class Attendance (theory) [PRESENCIAL][Combination of methods]	1
Writing of reports or projects [AUTÓNOMA][Group Work]	12
Writing of reports or projects [AUTÓNOMA][Case Studies]	7
On-line debates and forums [AUTÓNOMA][Combination of methods]	2
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	14

Group 10:
Initial date: 02-03-2020 **End date:** 05-04-2020

Group 17:
Initial date: 02-03-2020 **End date:** 05-04-2020

Unit 3 (de 4): MULTI EQUATION MODELS

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	6
Class Attendance (practical) [PRESENCIAL][Cooperative / Collaborative Learning]	5
Class Attendance (theory) [PRESENCIAL][Combination of methods]	1
Writing of reports or projects [AUTÓNOMA][Group Work]	7
Writing of reports or projects [AUTÓNOMA][Case Studies]	4
On-line debates and forums [AUTÓNOMA][Combination of methods]	2
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	8

Group 10:
Initial date: 06-04-2020 **End date:** 03-05-2020

Group 17:
Initial date: 06-04-2020 **End date:** 03-05-2020

Unit 4 (de 4): SPECIFIC TOPICS

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	7
Class Attendance (practical) [PRESENCIAL][Cooperative / Collaborative Learning]	2
Writing of reports or projects [AUTÓNOMA][Group Work]	3
On-line debates and forums [AUTÓNOMA][Combination of methods]	1
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	6

Group 10:
Initial date: 04-05-2020 **End date:** 17-05-2020

Group 17:
Initial date: 04-05-2020 **End date:** 17-05-2020

Global activity

Activities	hours
Class Attendance (theory) [PRESENCIAL][Lectures]	30
Class Attendance (practical) [PRESENCIAL][Cooperative / Collaborative Learning]	16.75
Class Attendance (theory) [PRESENCIAL][Combination of methods]	3.25
Writing of reports or projects [AUTÓNOMA][Group Work]	30
Writing of reports or projects [AUTÓNOMA][Case Studies]	14
Project or Topic Presentations [PRESENCIAL][Combination of methods]	1
On-line Activities [AUTÓNOMA][Self-study]	6
On-line debates and forums [AUTÓNOMA][Combination of methods]	6
Study and Exam Preparation [AUTÓNOMA][Combination of methods]	40
Group tutoring sessions [PRESENCIAL][Guided or supervised work]	1
Final test [PRESENCIAL][Assessment tests]	2

Total horas: 150

10. Bibliography and Sources

Author(s)	Title/Link	Publishing house	City	ISBN	Year	Description
Calderón Milán, López Ruiz y Taracón Morán	Prácticas de econometría	Popular Libros		84-931937-1-3	2001	
Baltagi, Badi H. (Badi Hani)	A Companion to econometric analysis of panel data	John Wiley & Sons		978-0-470-74403-1	2009	
Granger, Clive William John (1934-)	Essays in econometrics : collected papers of Clive W.J. Gran	Cambridge University Press		0-521-79697-0 (Pbk.	2001	
Greene, William H. (1951-)	Econometric analysis	Prentice Hall		978-0-13-513245-6	2008	
Gujarati, Damodar N.	Econometría	McGraw-Hill Interamericana		970-10-3971-8	2004	
Maddala, G. S.	Econometría	McGraw-Hill		9684516754	1988	
Pulido San Román, Antonio	Modelos econométricos	Pirámide		84-368-1534-3	2001	
Pérez López, César	Econometría avanzada : técnicas y herramientas	Pearson Educacion		978-84-8322-479-3	2008	