

TEACHING GUIDE OF THE SUBJECT: APPLIED ECONOMETRICS**1. General data**

Subject:	Applied Econometrics	CODE:	53342
Typology:	Elective	ECTScredits:	4,5
Grade:	316 ECONOMICS	Academic course:	2016-17
Centre:	(5) Faculty of Economic and Business Sciences	Group(s):	10
Course:	4	Duration:	First term
Main language for teaching:	Spanish	Second language:	English

Professor's name: **Nuria Huete Alcocer**

Office	Department	Phone	email	Tutorials timetable
Faculty of E and B SS / 1.26	Business Administration	8295	Nuria.Huete@uclm.es	To arrange according to schedules.

Professor's name: **Victor Raúl López Ruiz**

Office	Department	Phone	email	Tutorials timetable
Faculty of E and B SS / 3.09	Business Administration	2349	Victor.Lopez@uclm.es	To arrange according to schedules.

2. Prerequisites

It is recommended to have passed the subjects of Mathematics and Statistics. It is also advisable to have attended the previous course of Introduction to Econometrics.

3. Justification in the curriculum, relationship with other subjects and the profession

The subject Applied Econometrics, fits in the fourth year of Degree of Economics, within the module: "Quantitative Methods for Economics". It is taught in the first semester, having taken the subjects of discipline Econometrics.

It is an instrumental core subject in Applied Economics.

As for their relationship with other materials, it is a complementary support for subjects such as Introduction to Econometrics and / or Econometric Methods and Models. It is closely linked to subjects of the same level of Economic Theory, or International Economics.

In the economics profession is framed within the disciplines applied or quantitative, that will provide tools for implementing comprehensive economic analysis in local, national and international spaces. It is strongly linked with information technology and communication.

4. Competencies of the degree that the course contributes to achieve**Competences obtained with the subject**

E03	Ability to find economic data and select relevant facts.
E04	Analytical skills to identify and anticipate relevant economic and legal issues and the different alternative solutions.
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.
E11	Diagnosis and assessment skills to conduct structural and cyclical reports, as well as economic forecast summaries on the reality of the economy in Spain, the European Union and in any of the product sectors and factor markets. To do so, it will be necessary to understand and use common handbooks, as well as articles and, in general, leading edge bibliography in the core subjects of the curriculum.
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	To 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 to use and develop information and communication technologies and to apply them to the corresponding business department by using specific programmes for these business areas.
G05	Capacity for teamwork, to lead, direct, plan and supervise multidisciplinary and multicultural teams in both national and international environments so as to create synergies which benefit organisations.

5. Objectives or expected learning results

Results from taking the subject

Specific to the subject

Enable the student to listen and defend arguments orally or in writing.

Knowing the models and techniques for analyzing the economic, legal and social environment and its historical evolution.

Know the tools and methods for quantitative analysis of markets, sectors and companies, including models for decision making as well as models of economic forecasting.

To know the econometric models as a set of related processes in a permanent communication of information, where variables, mathematical relations, decision makers, financial resources, etc. participate.

Enable the student to solve problems creatively and innovatively.

Additional findings

Enable the student to the treatment of statistical information systems (databanks and sources), with the fundamental objective of forecasting, both cyclical and structural.

Enable the student for the application of quantitative methods as support decision-making in uncertain environment.

6. Syllabus

Module 1. APPLIED MODELLING

1.1 Design of models. Multi-equational Models.

1.2 Statistical Information Systems. Tools.

1.3 Structural equations.

Module 2. REGIONAL MODELLING

2.1 Approaches to the Regional modelling.

2.2 Background: Uni and Multi regional Models.

2.3 Applied models (Castilla - La Mancha Regional Model).

Module 3. NATIONAL MODELLING

3.1 Review: Macro-econometric modelling and approaches.

3.2 National and international projects.

Module 4. SECTORAL MODELLING

4.1 Background: Sectoral modelling approaches.

4.2 Cross-sectional and Panel Models.

4.3 Strategic Information Systems: Simulation.

7. Activities and methodology

Training activity	Methodology	Competencies	ECTS	Hours	Ev	Man	Rec	Description
Classroom teaching (theory) [face to face]	Expositive method / Masterclass	E04, E05, E06, G01, G04	0.90	22.50	Yes	No	No	To explain the basics. Master classes are attached to practices with the cooperative method and involve practical exercises and empirical models. The goal is to deepen educational content, eliminating the student can obtain by other means and promoting self-learning.
Classroom teaching (practices) [face to face]	Cooperative /collaborative learning	E03, E06, G01, G03 AND G04	0.44	11.00	Yes	No	No	Projects developments and cases throughout the course, according to the evolution of matter under the direction of Professor.
Practice in computer rooms [face to face]	(PBL) Problem Based Learning	E03-E06, G01-G04	0.16	4.00	Yes	No	No	Instrumental character. Students acquire the necessary knowledge about manage economic databanks, as well as on the use of economic and econometric, software.
Reporting [AUTONOMOUS]	Workgroups	E03 E04, E05, E06, E11, G01, G03, G04, G05	1.20	30.00	Yes	No	No	Development of dynamization and simultaneity projects under the direction of the Professor. Indispensable for the student to reach the objectives and to obtain a final positive evaluation.
Reporting [AUTONOMOUS]	Case study	E04, E05, E06, E11, G01, G05	0.88	22.00	Yes	No	No	Accomplishment of cases and tasks proposed during the course, at least one per block agenda.
Study or test preparation [AUTONOMOUS]	Combination of methods	E03 E04, E05, E06, E11, G01, G03	0.88	22.00	Yes	No	No	Preparatory student work, largely autonomous, for testing successfully.
Final test [face to face]	Evaluation tests	E04, E06, E11, G01, G03	0.04	1.00	Yes	Yes	Yes	It will consist of two blocks: theoretical issues of reasoning for the student, and practical, in which different exercises on a case are proposed. The day fixed for the final exam is performed.

Total:				4.50	112.50				

Total credits of classroom work: 1.54
Total hours of classroom work: 38.50

Total credits of autonomous work: 2.96
Total hours of autonomous work: 74.00

Training Activity: EV: Evaluable, OB: overcoming mandatory, Rec: recoverable.

8.Evaluation criteria

Evaluation system	%	Description
Elaboration of theoretical projects	30.00%	Workgroup. Attention not only to the content but to the correct use of scientific methods and the oral presentation will be given.
Self-assessment and co-evaluation activities	10.00%	Oral presentation.
Resolution of problems or cases	10.00%	Individual work. Participation and positive outcome of the practical sessions, seminars, tutorials, case ... It will mean 10% of the final grade, requiring a minimum of participation (attendance and non-attendance via Moodle platform).
Final Exam	50.00%	Final exam will be divided into two parts: theoretical and practical, the student will have to overcome.
Total:		100.00%

Criteria of evaluation of the regular call:

The evaluation is based on a continuous system in which the effort and student progress in developing a range of skills are valued.

Individual works are cases for delivery according to the school schedule. Participation and positive outcome of the practical sessions, seminars, and tutorials will be valued.

Groupware in evaluating this work attention not only to the content but to the correct use of scientific methods and the oral presentation will be given. Final test, through the development of two blocks: theoretical issues and practical exercises.

Special features of the extraordinary announcement:

There must be delivered course work (theoretical work) and conducted the exhibition of the same.

Special features of the special call for completion:

There must be delivered course work (theoretical work) and conducted the exhibition of the same.

9.Sequence of work, schedule, milestones and temporary investment**Non assignable to topics**

Training activities	Hours
- Reporting [AUTONOMOUS] [Workgroups] (30 h tot.)	5
-Final test [face to face] [evaluation tests] (1 h tot.)	1

Module 1 (of 4): I. APPLIED MODELING

Training activities	Hours
- Classroom teaching (theory)[face to face] [expositive method/Masterclass](22.5 h tot.)	5
- Classroom teaching (practices) [face to face] [cooperative/collaborative learning] (11 h tot.)	2
- Practices in computer rooms [face to face] [(PBL) Problem-Based Learning] (4 h tot.)	2
- Reporting [AUTONOMOUS] [Workgroups] (30 h tot.)	10
- Reporting [AUTONOMOUS] [case study] (22 h tot.)	6
- Study or test preparation [AUTONOMOUS] [combination of methods] (22 h tot.)	6

Period of time: 3 weeks

Group 10. Start date: 09-14-2016. Ending date: 10-04-2016

Module 2 (of 4). REGIONAL MODELING

Training activities	Hours
- Classroom teaching (theory) [face to face] [expositive method / lecture] (22.5 h tot.)	5
- Classroom teaching (practices) [face to face]	

[cooperative/collaborative learning] (11 h tot.)	3
- Practices in computer rooms [face to face]	
[(PBL) Problem-Based Learning] (4 h tot.)	1
- Reporting [AUTONOMOUS] [Workgroups] (30 h tot.)	5
- Reporting [AUTONOMOUS] [case study] (22 h tot.)	6
- Study or test preparation [AUTONOMOUS] [combination of methods] (22 h tot.)	5

Period of time: 3 weeks

Group 10. Start date: 05/10/2016. Ending date: 25/10/2016

Module 3 (of 4): 3. NATIONAL MODELLING

Training activities	Hour
- Classroom teaching (theory)[face to face]	
[expositive method/Masterclass] (22.5 h tot.)	4
- Classroom teaching (practices) [face to face]	
[cooperative/collaborative learning] (11 h tot.)	2
- Practices in computer rooms [face to face]	
[(PBL) Problem-Based Learning] (4 h tot.)	1
-Reporting [AUTONOMOUS] [Workgroups] (30 h tot.)	5
- Reporting [AUTONOMOUS] [case study] (22 h tot.)	6
- Study or test preparation [AUTONOMOUS]	
[combination of methods] (22 h tot.)	4

Period of time: 5 weeks

Group 10. Start date: 26/10/2016. Ending date: 15/11/2016

Module 4 (of 4): 4. SECTORAL MODELLING

Training activities	Hours
- Classroom teaching (theory) [face to face]	
[method exhibition/Masterclass] (22.5 h tot.)	8.5
- Classroom teaching (practices) [face to face]	

[cooperative/collaborative learning] (11 h tot.)	4
- Reporting [AUTONOMOUS] [Workgroups] (30 h tot.)	5
- Reporting [AUTONOMOUS] [case study] (22 h tot.)	4
- Study or test preparation [AUTONOMOUS] [combination of methods] (22 h tot.)	7

Period of time: 5 weeks

Group 10. Start date: 11-16-2016. Ending date: 20/12/2016

Global activity

Training activities	Sum
- Classroom teaching (theory) [face to face] [expositive method / Masterclass]	22.5
- Classroom teaching (practices) [face to face] [cooperative/collaborative learning]	11
- Practices in computer rooms [face to face] [(PBL) Problem-Based Learning]	4
- Reporting [AUTONOMOUS] [Workgroups]	36
- Reporting [AUTONOMOUS] [case study]	22
- Study or test preparation [AUTONOMOUS] [combination of methods]	22
- Final test [face to face] [evaluation tests]	1

Total hours: 112.5

Group 10. Start of activities: 09-14-2016 **end of activities:** 20/12/2016

General comments on planning:

This planning is indicative. The time schedule may be modified to unforeseen circumstances

10. References						
Author/s	Title	Editorial	City	ISBN	Year	Description
Baltagi, Badi H. (Badi Hani).	A Companion to econometric analysis of panel data.	John Wiley & Sons		978-0-470-74403-1	2009	
Baños, López, Nevado, y Sanz.	Estrategias de desarrollo local para los municipios de Castilla-La Mancha.	Popular Libros		84-93424-12-9	2005	
Granger, Clive William John (1934-).	Essays in econometrics: collected papers of Clive W.J.	Gran. Cambridge University Press		0-521-79697-0	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	
Nevado Peña, Domingo y López Ruiz, Víctor	El capital intelectual: valoración y medición. Modelos, informes, desarrollos y aplicaciones.	Prentice Hall Iberia		84-205-3067-0	2002	
Pérez López, César	Econometría avanzada: técnicas y herramientas.	Pearson Educación		978-84-8322-479-3	2008.	
Pulido San Román, Antonio	Modelos econométricos	Pirámide		84-368-1534-3	2001	
Victor Raúl López Ruiz	Economía del conocimiento en las ciudades de Castilla-La Mancha.	Altaban Albacete		9788415252283	2016	