



Academic year	2013-14
Subject	20612 - Introduction to Econometrics
Group	Group 30, 1S, GECO
Teaching guide	F
Language	English

Subject identification

Subject	20612 - Introduction to Econometrics
Credits	1.6 in-class (40 hours) 4.4 distance (110 hours) 6 totals (150 hours).
Group	Group 30, 1S, GECO(Campus Extens)
Teaching period	1st semester
Teaching language	English

Lecturers

Lecturers	Timetable for student attention					
	Starting time	Finishing time	Day	Start date	Finish date	Office
Lucia Mangiavacchi ---- lucia.mangiavacchi@uib.es	11:00h	12:00h	Friday	02/09/2013	27/06/2014	DB220

Degrees where the subject is taught

Degree	Character	Course	Studies
Degree in Economics	Compulsory	Second year	Degree

Contextualisation

This subject is designed to give students an understanding of why econometrics is necessary, and to provide them with a working knowledge of basic econometric tools so that:

- They can apply these tools to modeling, estimation, inference and forecasting in the context of real world economic problems.
- They can evaluate critically the results and conclusions from others who use the basic econometric tools.
- They have a foundation and understanding for further study of econometrics.

Requirements

Essential requirements

It is mandatory to have a complete knowledge of the contents of "Analysis of Economic Data".





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Recommendable

Knowledge of Excel

Skills

Specific

1. Bringing rationality to the analysis and description of any aspect of the economy.
2. Obtaining data from relevant information that is unable to be recognized by those who are not professionals of economics.
3. Analyzing economic problems using formal models and being able to incorporate extensions and variations to the basic models, respecting the basic assumptions and being aware of their potentiality and limitations.

Generic

1. Applying professional criterions based on technical tools to the analysis of economic problems.
2. Analyzing economic problems using critical reasoning, without prejudices, with precision and scientific rigor.

Content

Theme content

1. Review of statistical inference
 - Basic concepts.
 - Parameter estimation.
 - Hypothesis testing.
2. The simple linear regression model
 - Specification.
 - Estimation.
 - Evaluation.
 - Inference.
 - Forecasting.
3. The multiple linear regression model
 - Specification.
 - Estimation.
 - Evaluation.
 - Inference.
 - Forecasting.





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4. The linear regression model with qualitative explanatory variables
 - Dummy variables.
 - Interactions.
5. Problems with sample data. Multicollineality
 - Problems with sample data.
 - Definitions and consequences of multicollineality.
 - Detection measures.
6. Specification and measurement errors
 - Irrelevant variables.
 - Omitted variables.
 - Measurement errors.
7. Heteroskedasticity
 - The nature of heteroskedasticity.
 - Estimating a model with heteroskedasticity.
 - Detecting heteroskedasticity.
8. Autocorrelation
 - The nature of autocorrelation.
 - Estimating a model with autocorrelation.
 - Detecting autocorrelation.

Teaching methodology

The student will acquire the knowledge regarding the contents of this subject by theoretical and practical classes, and by in-class and home work. Information regarding the subject will be given at the Campus Extens web page.

Dead line for delivering home work must be fulfilled strictly.

Revision of marks of home-work and partial exams must be requested before 15 days after the delivery of the mark.

The student must achieved a minimum mark of 4 over 10 in the final exam in order to pass the course.

A track B has been established exclusively for those students who are working and cannot combine their job with the continuous assessment. The conditions of this track B are:

- There is only one evaluation criterion, the final exam, which accounts for 100% of the final grade.
- By default, all students will follow the track A. Students who wish to follow track B must inform the teacher by e-mail during the first two weeks of the course. After this time, the assessment option cannot be changed.
- Students who wish to follow this track must formally justify the incompatibility of their working hours with the class schedule (job contract, working life).

In-class work activities



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Modality	Name	Typ. Grp.	Description
Theory classes		Large group (G)	The teacher will explain the theoretical contents of the subject.
Practical classes	Computer practices	Medium group (M)	Practices using econometric software
Practical classes	Exercises	Medium group (M)	In-class exercises. Exercises will be delivered to the teacher at the end of the class.
Assessment	Final exam	Large group (G)	Exam with exercises and theoretical questions.
Assessment	Partial exam	Medium group (M)	Exam at the computer room in which students have to apply contents and techniques previously studied during practical classes.
Assessment	Partial exam	Large group (G)	Exam with exercises and theoretical questions.

Distance education work activities

Modality	Name	Description
Individual self-study		Study of the contents of the subject.
Group or individual self-study	Activities	Activities related to the computer classes.

Specific risks and protective measures

The learning activities of this course do not entail specific health or safety risks for the students and therefore no special protective measures are needed.

Workload estimate

Modality	Name	Hours	ECTS	%
In-class work activities		40	1.6	26.67
Theory classes		17	0.68	11.33
Practical classes	Computer practices	7	0.28	4.67
Practical classes	Exercises	10	0.4	6.67
Assessment	Final exam	1.5	0.06	1
Assessment	Partial exam	3	0.12	2
Assessment	Partial exam	1.5	0.06	1
Distance education work activities		110	4.4	73.33
Individual self-study		80	3.2	53.33
Group or individual self-study	Activities	30	1.2	20
Total		150	6	100





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At the beginning of the semester a schedule of the subject will be made available to students through the UIBdigital platform. The schedule shall at least include the dates when the continuing assessment tests will be conducted and the hand-in dates for the assignments. In addition, the lecturer shall inform students as to whether the subject work plan will be carried out through the schedule or through another way included in the Campus Extens platform.

Student learning assessment

Exercises

Modality	Practical classes
Technique	Extended-response, discursive examinations (Non-retrievable)
Description	In-class exercises. Exercises will be delivered to the teacher at the end of the class.
Assessment criteria	
Percentage of final qualification:	10% following path A
Percentage of final qualification:	0% following path B

Final exam

Modality	Assessment
Technique	Extended-response, discursive examinations (Retrievable)
Description	Exam with exercises and theoretical questions.
Assessment criteria	
Percentage of final qualification:	50% following path A
Percentage of final qualification:	100% following path B

Partial exam

Modality	Assessment
Technique	Extended-response, discursive examinations (Non-retrievable)
Description	Exam at the computer room in which students have to apply contents and techniques previously studied during practical classes.
Assessment criteria	
Percentage of final qualification:	20% following path A
Percentage of final qualification:	0% following path B





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Partial exam

Modality	Assessment
Technique	Extended-response, discursive examinations (Non-retrievable)
Description	Exam with exercises and theoretical questions.
Assessment criteria	
Percentage of final qualification:	20% following path A
Percentage of final qualification:	0% following path B

Resources, bibliography and additional documentation

Basic bibliography

Arcarons, J. and Calonge, S. (2008). "Microeconometría. Introducción y Aplicaciones con software econométrico para Excel". Delta Publicaciones. Madrid.

Ashenfelter, O., Levine, P. B. and Zimmerman, D. J. (2003). "Statistics and Econometrics". Wiley. USA.

Cladera, M. and Matas, A. (2002). 'Introducció a l'Anàlisi de Regressió Lineal'. Col·lecció Materials Didàctics de la Universitat de les Illes Balears, nº 98.

Cladera, M. and Matas, A. (2002). 'Introducció a la Inferència Estadística'. Col·lecció Materials Didàctics de la Universitat de les Illes Balears, nº 93.

Cladera, M.; Cubero, F. J. and Mateo, S. (2008). 'Exercicis d'Introducció a l'Econometria'. Col·lecció Materials Didàctics de la Universitat de les Illes Balears, nº 134.

Gujarati (2003). 'Econometría'. McGrawHill.

Hill, R. C., Griffiths, W.E. and Lim, G. C. (2008). "Principles of Econometrics". Wiley. USA.

Maddala (1996). 'Introducción a la Econometría'. Prentice-Hall.

Wooldridge, J. M. (2001). "Introducción a la Econometría". Thomson Learning. México.

Complementary bibliography

Other resources

Additional materials in the web of the subject.

