		Teaching Guide		
	Identifying	Data		2015/16
Subject (*)	ESTATÍSTICA		Code	730G04008
Study programme	Grao en enxeñaría en Tecnoloxías	Industriais		
		Descriptors		
Cycle	Period	Year	Туре	Credits
Graduate	2nd four-month period	First	FB	6
Language	Spanish			
Teaching method	Face-to-face			
Prerequisites				
Department	Análise Económica e Administración	n de Empresas		
Coordinador	Garcia del Valle, Alejandro E-mail alejandro.garcia.delvalle@udc.es		a.delvalle@udc.es	
Lecturers	Crespo Pereira, Diego	E-mai	diego.crespo@	udc.es
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Web			·	
General description				

	Study programme competences / results
Code	Study programme competences / results

Learning outcomes			
Learning outcomes	Study	/ progra	mme
	con	npetenc	es/
		results	
Capacity for abstraction, understanding, analysis and simplification of instances and processes.	A1	B2	C1
		В3	C4
		B4	
		B5	
		В6	
		В7	
Using statistical software for solving engineering problems involving randomness and large volume of data.	A1		C1
Ability to solve statistical problems encountered in engineering.	A1		C1

	Contents
Topic	Sub-topic
Introduction to Statistics	
2. Exploratory data analysis.	
3. Probability.	
4. Ramdom variables.	
5. Discrete random variables and probability distributions.	
6. Continous random variables and probability distributions.	
7. Joint probability distributions.	
8. Statistical inference.	
9. Point estimation of parameters.	
10. Statistical intervals for a single sample.	
11. Test of hypotheses for a single sample.	
12. Regression an analysis of variance (ANOVA).	

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Methodologies / tests	Competencies /	Teaching hours	Student?s personal	Total hours
	Results	(in-person & virtual)	work hours	
Guest lecture / keynote speech	A1 B2 B6 B7	30	36	66
Problem solving	A1 B3 B4 B5 C1 C4	20	18	38
ICT practicals	A1 B6 B7 C1 C4	10	10	20
Mixed objective/subjective test	A1 B2 B3 B4 B5	3	9	12
Objective test	A1 B2 B3 B4	3	9	12
Personalized attention		2	0	2
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(*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies	
Methodologies	Description
Guest lecture /	Lectures about the course topics.
keynote speech	
Problem solving	Solving exercises and statistical problems encountered in engineering.
ICT practicals	Resolution of practical cases of statistical problems by Excel.
Mixed	Midterm exam of the first issues of the subject.
objective/subjective	
test	
Objective test	Final exam of the subject

	Personalized attention
Methodologies	Description
ICT practicals	The personalized attention will be made in the tutorials.
Objective test	
Mixed	
objective/subjective	
test	

		Assessment	
Methodologies	Competencies /	Description	Qualification
	Results		
ICT practicals	A1 B6 B7 C1 C4	Evaluation of case studies solved in small groups.	25
Objective test	A1 B2 B3 B4	Final exam with test questions and troubleshooting.	50
Mixed	A1 B2 B3 B4 B5	Midterm exam with test questions and troubleshooting.	25
objective/subjective			
test			

A	Assessment comments
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	Sources of information
Basic	- García del Valle, Alejandro; Crespo, Diego (2010). Apuntes de Estadística para Ingenieros. Moodle UDC
	- Douglas C. Montgomery, George C. Runger (2011). Applied Statistics and Probability for Engineers. John Wiley
Complementary	- S. Christian Albright, Wayne Winston, Christopher J. Zappe (1999). Data Analysis & amp; amp; amp; amp; amp; amp; amp; amp;
	Decision Making with Microsoft Excel. Duxbury
	- Ronald E. Warpole (1999). Probabilidad y Estadística para Ingenieros. Pearson

Recommendations



Subjects that it is recommended to have taken before	
Subjects that are recommended to be taken simultaneously	
Subjects that continue the syllabus	
ORGANIZACIÓN DE EMPRESAS/730G03024	
SIMULACIÓN DE PROCESOS INDUSTRIAIS E OPTIMIZACIÓN/730G04065	
Other comments	
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(*)The teaching guide is the document in which the URV publishes the information about all its courses. It is a public document and cannot be modified. Only in exceptional cases can it be revised by the competent agent or duly revised so that it is in line with current legislation.