



Teaching Guide

Teaching Guide				
Identifying Data				2019/20
Subject (*)	Statistics I		Code	611G02006
Study programme	Grao en Administración e Dirección de Empresas			
Descriptors				
Cycle	Period	Year	Type	Credits
Graduate	2nd four-month period	First	Basic training	6
Language	SpanishGalicianEnglish			
Teaching method	Face-to-face			
Prerequisites				
Department	Economía			
Coordinador	Rey Graña, Carlota	E-mail	carlota.rey@udc.es	
Lecturers	Lado González, Eva Mª Lodeiro Hermida, Maria Jose Mourelle Espasandin, Estefania Rey Graña, Carlota	E-mail	eva.lado@udc.es maria.lodeiro@udc.es estefania.mourelle@udc.es carlota.rey@udc.es	
Web				
General description	In the first part of the subject, the aim is to learn and understand the basic concepts on Descriptive Statistics, Time Series and Index Numbers. In the second part, the objective is to learn and understand the essential concepts on Probability Calculus.			

Study programme competences

Code	Study programme competences
A4	Elaborate advisory reports on specific situations of companies and markets
A6	Identify the relevant sources of economic information and to interpret the content.
A7	Understand economic institutions as a result and application of theoretical or formal representations which explain the evolution of the economy.
A8	Derive, based on from basic information, relevant data unrecognizable by non-professionals.
A10	Read and communicate in a professional environment at a basic level in more than one language, particularly in English
A11	To analyze the problems of the firm based on management technical tools and professional criteria
A12	Communicate fluently in their environment and work by teams
B1	CB1-The students must demonstrate knowledge and understanding in a field of study that part of the basis of general secondary education, although it is supported by advanced textbooks, and also includes some aspects that imply knowledge of the forefront of their field of study
B2	CB2 - The students can apply their knowledge to their work or vocation in a professional way and have competences typically demonstrated by means of the elaboration and defense of arguments and solving problems within their area of work
B3	CB3- The students have the ability to gather and interpret relevant data (usually within their field of study) to issue evaluations that include reflection on relevant social, scientific or ethical
B4	CB4-Communicate information, ideas, problems and solutions to an audience both skilled and unskilled
B5	CB5-Develop skills needed to undertake further studies learning with a high degree of autonomy
B6	CG1-Perform duties of management, advice and evaluation in business organizations
B7	CG2-Know how to use the concepts and techniques used in the various functional areas of the company and understand the relationships between them and with the overall objectives of the organization
B10	CG5-Respect the fundamental and equal rights for men and women, promoting respect of human rights and the principles of equal opportunities, non-discrimination and universal accessibility for people with disabilities.
C1	Express correctly, both orally and in writing, in the official languages of the autonomous region
C4	To be trained for the exercise of citizenship open, educated, critical, committed, democratic, capable of analyzing reality and diagnose problems, formulate and implement knowledge-based solutions oriented to the common good
C5	Understand the importance of entrepreneurial culture and know the means and resources available to entrepreneurs
C6	Assess critically the knowledge, technology and information available to solve the problems and take valuable decisions



C7	Assume as professionals and citizens the importance of learning throughout life.
C8	Assess the importance of research, innovation and technological development in the economic and cultural progress of society.

Learning outcomes			
Learning outcomes		Study programme competences	
Knowing and understanding the handling of basic techniques for Data Analysis and Descriptive Statistics.		A4 A6 A7 A8 A10	B6 B10 C1 C5 C6 C7 C8
Knowing and understanding the fundamentals on Data Analysis and Descriptive Statistics.		A4 A10 A11 A12	B1 B2 C1 C4 C5 C6 C7 C8
Knowing and understanding the fundamentals on Probability Calculus.		A4	B3 B4 C1 C4 C5 C6 C7 C8
Handling the basic concepts on Probability Calculus.		A4	B5 B7 C8

Contents	
Topic	Sub-topic
Data Description Statistical techniques	<ul style="list-style-type: none"> - Statistical analysis of a variable - Statistical analysis of two variables - Regression and correlation - Time series - Index numbers
Probability theory	<ul style="list-style-type: none"> - Introduction to Probability - Random variable - Main probability distributions - Convergence and central limit theorem

Planning				
Methodologies / tests	Competencies	Ordinary class hours	Student's personal work hours	Total hours
Introductory activities	B5 C6 C7 C8	1	0	1
Guest lecture / keynote speech	A4 A7 A11 B1 B4 B7 C1 C5	17	34	51
Workshop	A6 A10 A11 A12 B2 B3 B5 B6 B10 C1 C4 C5 C6	17	42.5	59.5
ICT practicals	A8 A10 A11 C4 C8	8	16	24
Objective test	A4 A6 A12 B2 B3 B5 B7 C1 C6	2	6	8



Personalized attention		6.5	0	6.5
(*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.				

Methodologies

Methodologies	Description
Introductory activities	It consists in the presentation of the subject and the exhibition of the activities that the students must develop and of the criteria with which they will be evaluated.
Guest lecture / keynote speech	Each keynote session consists of the teachers' oral exposition of concepts and methods, although they must have the active participation of the students. The exhibition is complemented by the use of audiovisual media and includes examples and exercises that make it possible to highlight the limitations and possibilities of the methods exposed
Workshop	Each workshop is an interactive session in which applications, exercises and problems are made that allow students to understand the theoretical foundations of the subject and learn to value, from a critical point of view, the results obtained
ICT practicals	These are interactive sessions dedicated to the learning of the appropriate computer tools to carry out empirical applications of the methods exhibited in the theoretical sessions
Objective test	It is a written test to evaluate the degree of learning

Personalized attention

Methodologies	Description
Workshop ICT practicals Objective test	The heterogeneity of the students, in terms of their previous training and their academic situation, requires a personalized attention that allows to solve the specific doubts that are posed to them during the course. TIC practices, workshops and tutoring are important tools to solve theoretical and empirical problems, both collectively and individually.

Assessment

Methodologies	Competencies	Description	Qualification
Workshop	A6 A10 A11 A12 B2 B3 B5 B6 B10 C1 C4 C5 C6	The active presence of the students in these classes will be assessed, in which they must resolve and deliver the controls, problems, exercises and questions that are proposed to them, in the form that will be detailed at the beginning of the course.	30
Objective test	A4 A6 A12 B2 B3 B5 B7 C1 C6	The objective test for learning assessment combines conceptual and reasoning questions with other practical content.	70

Assessment comments



A) All evaluation tests are face-to-face and cannot be replaced by exercises or work. For its realization, group changes will not be allowed, except those officially granted by the Faculty, which must be adequately justified.

B) June and July Opportunities

To pass the subject, it will be necessary to obtain at least 5 points in the sum of the qualifications corresponding to the tests of continuous evaluation and to the final examination.

The evaluation system will be applied, as described in the preceding paragraph, in both opportunities to all students, irrespective of their academic situation.

Students with recognition of part-time dedication are exempt from attendance except on the dates of completion of the evaluation tests.

The non-presented qualification corresponds only to students who participate in evaluation activities that have a weighting of less than 20 per cent of the total qualification.

C) Early opportunity.

The evaluation corresponding to the early opportunity will be developed through a single exam that will be valued with a maximum of 10 points, and that will have as basis the complete syllabus described in the section "Contents" of the guide of the current academic course. To pass the subject it will be necessary to obtain a minimum of 5 points in this exam. These conditions of evaluation are specific for the early opportunity and will only be applied in this case.

D) Opportunities for June, July and early.

As is mandatory, the rules of evaluation, review and claim of the qualifications of the studies of degree and university Master of the UDC will apply to the evaluation tests (https://www.udc.es/export/sites/udc/normativa/_galeria_down/Academica/Normas_avalacion_revision_reclamacion_consolidado_I.pdf).

Academica/Normas_avalacion_revision_reclamacion_consolidado_I.pdf).

It is recommended to pay special attention to articles 10. Student identification, and 14. Fraud and disciplinary responsibilities Commission.

Sources of information

Basic	<ul style="list-style-type: none"> - Casas Sánchez, J. M. y otros (2006). Ejercicios de Estadística Descriptiva y probabilidad. Madrid, Pirámide - Martín-Pliego, F. J., Montero, J. M. y Ruiz-Maya, L. (2006). Problemas de Probabilidad. Madrid, Thomson - Martín-Pliego, F. J. y Ruiz-Maya, L. (2006). Fundamentos de Probabilidad. Madrid, Thomson - Esteban García, J. y otros (2004). Estadística Descriptiva y nociones de Probabilidad. Madrid, Thomson - Montiel, A. M., Rius, F. y Barón, F. J. (1997). Elementos básicos de Estadística Económica y Empresarial. Madrid, Prentice Hall - Levine, D. M. et al. (2011). Statistics for managers using MS Excel, 6/E. Prentice Hall - Levine, D. M., Krehbiel, T. C. and Berenson, M. L. (2010 (5th ed.)). Business Statistics: A first course. Upper Saddle River, Pearson Education - Newbold, P., Carlson, W. and Thorne, B. (2010). Statistics for business and economics, 7/E. Pearson/Prentice Hall <p>Os tres últimos libros servirán como referencia bibliográfica para o grupo de inglés (grupo A) desta materia.</p>
Complementary	<ul style="list-style-type: none"> - García-Carro Peña, B., Sánchez Sellero, M. C. y Martínez Filgueira, X. M. (2003). Curso práctico de Probabilidad con aplicaciones económicas. Universidad da Coruña - Cao Abad, R. y otros (2001). Introducción a la Estadística y sus aplicaciones. Madrid, Pirámide - Sáenz, J. A., Bedate, A., Rivas, A. y González, J. (1996). Problemas de Estadística Descriptiva Empresarial. Madrid, Ariel - Tomeo Perucha, V. y Uña Juárez, I. (2009). Estadística Descriptiva. Madrid, Garceta - Uña Juárez, I., San Martín Moreno, J. y Tomeo Perucha, V. (2010). Cálculo de Probabilidades. Madrid, Garceta - Benítez Márquez, M.D. y otros (2012). Estadística Descriptiva. Madrid, McGraw-Hill

Recommendations

Subjects that it is recommended to have taken before

Mathematics I/611G02009

Subjects that are recommended to be taken simultaneously



Mathematics II/611G02010
Subjects that continue the syllabus
Statistics and Introduction to Econometrics/611G02014
Other comments
Group A of this subject will be taught entirely in English.

(*)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.