COURSE DATA

DATA SUBJECT

Code: 35887
Name: Statistics
Cycle: Undergraduate Studies
ECTS Credits: 4.5
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1314 - Degree in International Business	Facultat d'Economia	2	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1314 - Degree in International Business	Quantitative methods applied to business	COMPULSORY

COORDINATION

CABALLER TARAZONA MARIA

SUMMARY

Statistics is a basic course within the module Quantitative Methods Applied to Business taught in the first semester of the second year of the International Business degree, with a total load of 4,5 ECTS.

The course provides the fundamentals of the quantitative analysis of information, being its ultimate goal to help in decision-making under uncertainty. The contents is organized in three parts: Descriptive Statistics, Probability Theory and Introduction to Inferential Statistics.

Part I, Descriptive Statistics, introduces basic concepts related to the statistical treatment of data and the summary of statiscal variables. Part II, Probability Theory, aims at introducing basic theoretical concepts that allow to model uncertainty. Finally, part III, Introduction to Inferential Statistics, introduces some applications of mathematical statistics to decision processes.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

It is recommended for students to have some basic mathematical knowledge.

COMPETENCES / LEARNING OUTCOMES

1314 - Degree in International Business

Adquirir conocimientos básicos de Estadística.

Be able to work in multidisciplinary and intercultural teams.

Conocer el análisis de datos unidimensionales.

Conocer los aspectos básicos de las series temporales y de los modelos univariantes.

Develop the capacity to evaluate and critically analyse international economic phenomena and agents.

Develop the capacity to prepare and defend reports that contribute to the decision-making of public and private agents.

Know how to use the statistical methods and software to manage the company's operations.

Saber utilizar paquetes informáticos específicos que ayuden a resolver problemas de toma de decisiones en el ámbito empresarial.

Tener conocimientos de regresión.

Use the economic and financial information of the company to make decisions.

DESCRIPTION OF CONTENTS

1. ANALYSIS AND SUMMARY OF INFORMATION

Unit 1. Graphic analysis.

Unit 2. Numerical analysis I: measures of central tendency.

Unit 3. Numerical analysis II: measures of variability.

2. PROBABILITY MODELS

Unit 4. Fundamentals of probability theory.

Unit 5. Discrete probability distributions.

Unit 6. Continuous probability distributions.

3. SAMPLING AND ESTIMATION

Unit 7. Distribution of sampling statistics.

Unit 8. Confidence intervals for the mean.

Unit 9. Confidence intervals for other parameters.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	15,00
Computer classroom practice	30,00
Total hours	**45,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	0,00
Independent study and work	10,00
Preparation of lessons	25,00
Preparation for assessment activities	12,50
Resolution of case studies	20,00
Total hours	**67,50**

TEACHING METHODOLOGY

Course time is split between lectures and computer lab work. Therefore, the teaching method will depend on the class session (lecture or computer lab).

Lectures, will take place on-line though the different tools available in aula virtual.

Computer labs, with a teaching load of 2 hours a week, focus on presenting the students with practical examples and finding solutions to problems based on the application of (previously introduced) theoretical concepts. These sessions are based on different active teaching methods, but will rely mostly on problem solving. The main goal is to apply theoretical concepts to case problems.

EVALUATION

Grades are a weighted average of the results from a final exam and coursework.

1. The weight of the final exam is 70% of the course grade. It will include theoretical and/or practical problems to assess students proficiency in the knowledge and application of the core tools and concepts of the subject.
2. The remainder 30% of the final grade is the assessment of in-class participation, coursework and problems-solving and quizzes.

IMPORTANT:

No student will get a positive assessment of the course (5 points or more) without passing the final exam (5 points out of 10). Students failing the final exam will get a maximum final grade of 4,5 points.

A student might opt out of in-class assignments assessment. In this case his/her final grade will be exclusively based on the final exam, and will opt to a maximum grade of 7 points out of 10.

REFERENCES

- Newbold, Paul; Carlson, William L. y Thorne, Betty (2010). Statistics for business and economics. Upper Saddle River (NJ) : Pearson Education. También pueden consultarse las ediciones de 2007 y 2003. En castellano: Newbold, Paul; Carlson, William L. y Thorne, Betty (2013). Estadística para Administración y Economía. Pearson-Prentice Hall, Madrid (8ª Edición). ESTEBAN GARCÍA, et al (1): Estadística descriptiva y nociones de probabilidad. Ed. Internacional Thomson. Madrid, 2005. ESTEBAN GARCÍA, et al (2): Inferencia Estadística. Ed. Garceta. Madrid, 2011. Levine, David M.; Stephan, David F.; Krehbiel, Timothy C. y Berenson, Mark L. (2008). Statistics for Managers: using Microsoft Excel. Upper Saddle River (NJ): Pearson Education. Lind, D.A.; Marchal, W.G.; Wathen, S.A. y otros (2008). Estadística Aplicada a los Negocios y la Economía. McGraw Hill, México, (13ª Edición). CEACES, Proyecto (Contenedor Hipermedia de Estadística Aplicada a las Ciencias Económicas y Sociales). Universitat de València. ON LINE:http://www.uv.es/ceaces

- Berenson, Mark L.; Levine, David M. y Krehbiel, Timothy C. (2009). Basic business statistics :

concepts and applications Upper Saddle River, N.J. : Pearson Prentice Hall. En castellano: Berenson, Mark L.; Levine, David M. y Krehbiel, Timothy C. (2001). Estadística para administración. México: Pearson Educación. CANAVOS, G.C. (1984). Probabilidad y Estadística: aplicaciones y métodos. McGraw-Hill, México. La-Roca, F. (2006) Estadística aplicada a les ciències socials Publicacions de la Universitat de València, València. McClave, James T.; Benson, P. George y Sincich, Terry. (2008). Statistics for business and economics. Upper Saddle, NJ : Pearson Prentice Hall. DeGROOT, M.H. (1988). Probabilidad y Estadística. Wilmington: Addison-Wesley Iberoamericana Wilmington Escuder, R. y Murgui, J.S. (2011). Estadística Aplicada. Economía y Ciencias Sociales. Tirant lo Blanch. Valencia, (2ª edición). Murgui, J.S. y otros (2002). Ejercicios de Estadística. Economía y Ciencias Sociales. Valencia. Tirant lo Blanch. Anderson, D.R.; Sweeney, D.J. y Williams, T.A. (2001). Estadística para Administración y Economía. International Thomson Editores, México. RUÍZ-MAYA, L. y MARTÍN-PLIEGO, F.J. (2004). Fundamentos de Inferencia Estadística. Ed. Thomson, Madrid, (3ª Edición). SHELDON M. ROSS (2007): Introducción a la Estadística. Barcelona Reverté.