COURSE DATA

DATA SUBJECT

Code: 35941
Name: Statistics II
Cycle: Undergraduate Studies
ECTS Credits: 4.5
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
1315 - Degree in Finance and Accounting	Facultat d'Economia	2	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1315 - Degree in Finance and Accounting	Statistics II	COMPULSORY

COORDINATION

RUIZ PONCE FELIX

SUMMARY

Statistics II is a 4.5 ECTS credit compulsory subject assigned to the area of Quantitative Methods for Economics and Business that is lectured in the first term of the second year of the Finance and Accounting Degree.

In the professional development of graduates in the degree of Finance and Accounting, the concepts developed in *Statistics II* are fundamental for the application of statistical methods to the analysis of numerical data from measurements or observation in the business world being an essential tool in analysis and decision making. The background recommended necessary for the follow-up of this subject are those included in *Statistics I*.

As for the contents of this subject, first there is a brief introduction of general concepts of Statistical Inference. Sampling types and some of the most important applications of convergence in distribution are also introduced. Subsequently, the main elements of the Statistical Inference are stated and developed. After establishing the basic notions of statistical sampling, the estimation of population characteristics and the testing of hypotheses are addressed, both in the parametric and in the non-parametric context.

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 to have studied and passed the first year subjects Mathematics and Statistics I.

COMPETENCES / LEARNING OUTCOMES

1315 - Degree in Finance and Accounting

CM3FYC 1 Conocer el lenguaje estadístico y las capacidades y límites del modelo estadístico para describir una situación financiera y empresarial.

CM3FYC 2 Conocer y comprender las herramientas estadísticas y econométricas básicas para la presentación, análisis, diagnóstico y prospección de resultados financieros y empresariales.

DESCRIPTION OF CONTENTS

1. INTRODUCTION TO STATISTICAL INFERENCE

1. Central Limit Theorem
2. General concepts: universe, population and sample. Objectives of statistical inference.
3.Types of sampling. Random sampling
4. Statistics and associated distributions.

2. ESTIMATION

1. Point estimate. Maximum-likelihood estimators.
2. Confidence interval estimation.
3. Sample-size determination.

3. CONTRASTS OF PARAMETRIC HYPOTHESES

1. Concepts of Hypothesis testing.
2. Two tail hypothesis tests.
3. One tail hypothesis tests.

1. Goodness-of-fit tests.
2. Independence and Homogeneity tests.

4. CONTRASTS FROM NON-PARAMETRIC HYPOTHESES

1. Goodness-of-fit tests.
3. Other non-parametric tests.

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	1,00
Individual or group project	10,00
Independent study and work	15,00
Preparation of lessons	22,50
Preparation for assessment activities	16,00
Resolution of case studies	3,00
Total hours	**67,50**

TEACHING METHODOLOGY

The development of the subject is, fundamentally, structured around theory sessions and practical sessions. Depen

In the theoretical sessions, that last 1 hour, the main contents of each one of the lessons that form the subject will be exposed, introducing the concepts and contextualising them in the different fields of application of the socioeconomic environment.

The predominant teaching method in the theoretical classes will be the participatory master class. This methodology makes it possible to manage large groups of students in an organised manner, offering the advantages of a master class without limiting the participation of students and the teacher-student interaction. It will seek for encouraging participation and discussion in the class, in order to offer students a direct involvement with the content.

In the practical sessions, that last 2 hours, the teacher will propose to students situations (real or fictitious) that they will have to solve applying the theoretical concepts learned. These practical classes will follow different teaching strategies depending on the contents discussed in the corresponding theoretical session, although fundamentally they will be based on the resolution of problems. Their objective is to

complement the concepts studied in the theoretical session by applying these to the resolution of practical cases. Likewise, in the practical sessions the teacher will be able to propose one or several activities to be solved by the students that will cover the different lessons of the subject, with the purpose that the student acquires the competences enumerated in this academic guide.

EVALUATION

The assessment of the student learning in this subject will be done through a triple process: a synthesis test at the end of the semester, which assesses the level of achievement of learning outcomes and especially those focused on the specific competences of the subject with respect to contents and application, the evaluation of the practical activities developed by the student during the course, and the continuous evaluation of students, based on their participation and involvement in the teaching-learning process.

The synthesis test will consist of theoretical and practical questions, giving an important weight to questions that allow to assess if the student has assimilated the key elements of the program. This test will be 70% of the final grade.

The evaluation of the practical activities will be carried out with the evaluation of exercises, works, memories, oral presentations, etc.

The continuous evaluation aims to develop the skills of the students and stimulate daily work and will be based on an assessment of the follow-up made by the students of the subject through participation in the classes. The continuous evaluation and the evaluation of the practical activities will suppose altogether 30% of the final note. By their very nature, continuous assessment activities are NOT recoverable.

The final grade will be the weighted sum of the synthesis test and the continuous evaluation and practical activities. In case the synthesis test is not passed, the final grade cannot exceed a maximum of 4.5.

Students who do not participate in the continuous assessment nor in practical classes may be evaluated in the synthesis test and may obtain a final grade of 7. In order to pass the course, they must have obtained a minimum of 5 out of 7 points in said test

REFERENCES

- ANDERSON, D.R.; SWEENEY, D.J. y WILLIAMS, T.A. (2001). Estadística para Administración y Economía. International Thomson Editores, México.
- BERENSON, M.L.; LEVINE, D.M y KREHBIEL, T.C. (2001) Estadística para Administración. Pearson-Prentice Hall, México.
- CANAVOS, G.C. (1984). Probabilidad y Estadística: aplicaciones y métodos. McGraw-Hill, México.
- DeGROOT, M.H. (1988). Probabilidad y Estadística. Wilmington: Addison-Wesley Iberoamericana Wilmington.
- HILDEBRAND, D.K. y OTT, R.L. (1997). Estadística aplicada a la Administración y a la Economía. Addison-Wesley Iberoamericana, Wilmington.
- LIND, D.A. y otros (2008). Estadística Aplicada a los Negocios y la Economía. McGraw Hill, México, (13ª Edición).
- NEWBOLD, P. y otros (2008). Estadística para Administración y Economía. Pearson-Prentice Hall, Madrid (6ª Edición).
- 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.
- CEACES, Proyecto (Contenedor Hipermedia de Estadística Aplicada a las Ciencias Económicas y Sociales). Universitat de València. ON LINE: http://www.uv.es/ceaces
- ESCUDER, R. y MURGUI, J.S. (2011). Estadística Aplicada. Economía y Ciencias Sociales. Tirant lo Blanch. Valencia, (2ª edición).
- ESTEBAN , J. et al (2005): Estadística descriptiva y nociones de probabilidad. Ed. Internacional Thomson. Madrid.
- ESTEBAN, J. y otros (2018). Inferencia Estadística. 2ª Edición revisada. Garceta, Madrid.

- MURGUI, J.S. y otros (2002). Ejercicios de Estadística. Economía y Ciencias Sociales. Valencia: Tirant lo Blanch.

- BEAMONTE, E. (2011). Apuntes de Estadística II. Grado en Finanzas y Contabilidad. Reproexpres S.L., Valencia (2ª edición).