COURSE DATA

DATA SUBJECT

Code: 35826
Name: Methods for the analysis of corporate information and decision making
Cycle: Undergraduate Studies
ECTS Credits: 6
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
1313 - Degree in Business Management and Administration	Facultat d'Economia	4	First quarter
1330 - Degree in Business Management and Administration (Ontinyent)	Facultat d'Economia	4	First quarter
1926 - Double Degree Program Tourism and BMA	Facultat d'Economia	5	First quarter
1926 - Double Degree Program Tourism and BMA	Facultat d'Economia	5	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1313 - Degree in Business Management and Administration	Methods of analysis	ELECTIVES
1330 - Degree in Business Management and Administration (Ontinyent)	Métodos de Análisis	ELECTIVES
1926 - Double Degree Program Tourism and BMA	Asignatura optativa de quinto curso	ELECTIVES
1926 - Double Degree Program Tourism and BMA	Asignatura optativa de quinto curso	ELECTIVES

COORDINATION

COLOM ANDRES MARIA CONSUELO

SUMMARY

Methods for the Analysis of Business Information and Decision Making, assigned to the area of Quantitative Methods for Economics and Business, and is taught in the first semester of the fourth year of the degree in Business Administration and Management in the framework of the electivity of the curricular intensification of Creation and Direction of Companies.

Completing this subject will allow the student to enter, through the resolution of cases and the understanding of the foundations

theoretical, in the study and analysis of the economic and social reality in which the company is immersed as well as in the business reality itself. The business environment and reality are characterized, and increasingly, by a considerable and growing complexity. One of the dimensions of this complexity is the high number of variables, attributes and factors to consider as well the no less large number of agents, customers, suppliers, competitors and markets. In short, the reality of the company is multidimensional and multi-individual and therefore generates large volumes of information that require an adequate treatment, capable of highlighting the fundamental aspects of the consideration of all the information that is relevant to the decision making process. business decisions.

Knowing how to handle with large masses of data, order them, classify them, detect the most important factors that manifest their high number of variables or classify individuals in groups of homogeneous behavior are, among others, some of the purposes that are pursued with a set of techniques known as multivariate analysis that integrate part of the contents of the subject.

The statistical treatment of qualitative information, without a doubt transcendental in the world of the company, and the statistical analysis does not parametric in all those cases in which it is difficult to propose a parametric model to study some features of interest is another of the blocks of the subject.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

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

OTHER REQUIREMENTS

Formally, no previous knowledge is necessary required. However, a minimum knowledge of Mathematics, Statistics and Econometricsit is recommended , all these subjects are taught in previous courses. Likewise, you should have standard familiarity with the usual IT tools.

COMPETENCES / LEARNING OUTCOMES

1313 - Degree in Business Management and Administration

Be able to analyse and search for information from different sources.

Be able to apply analytical and mathematical methods for the analysis of economic and business problems.

Be able to define, solve and present complex problems systemically.

Be able to express oneself in formal, graphic and symbolic languages.

Be able to make decisions.

Be able to make decisions under certainty and uncertainty environments.

Be able to solve problems.

Be able to understand and use the different quantitative and qualitative methods to reason analytically, evaluate results and predict economic and financial parameters.

Be able to use ICTs in the field of study.

Be able to work in a team.

Demonstrate capacity for analysis and synthesis.

Have critical and self-critical capacity.

Manage time effectively.

DESCRIPTION OF CONTENTS

1. Information Systems and statistical sources

2. Non-parametric data analysis

2.1.- Qualitative variables and contingency tables.
2.2.- Independence and association in the characteristics of the realities observed.
2.3.- Paired and unpaired data. Boards
2.4.- Non-parametric measures of association.
2.5.- Nonparametric tests with SPSS

3. Analysis of Variance.

3.1.- Introduction: approach of the Problem
3.2.- Analysis of one and two variation factors one and two ways ANOVA
3.3.- Analysis of more than two variation factors

4. Dimension reduction

4.1.- Introduction. The reduction as an instrument for the elaboration of constructs.
The factor analysis model.
4.2.- Methods of extracting factors. Principal components method.
4.3.- Interpretation of the factorial solution and factor rotation.
4.4.- Scores of the factors.
4.5.- Application with the SPSS.
4.6.- Dimension reduction with qualitative information. Introduction to correspondence analysis

5. Grouping by similarities

5.1.-Introduction. Measures of similarity and dissimilarity.
5.2.-Grouping methods: hierarchical and non-hierarchical clustering.
5.3.-Clustering criteria and algorithms
5.3.-Hierarchical tree diagram.
5.4.-Determination of the number of groups to obtain.
5.5.-Application with the SPSS.

6. Discriminant analysis

6.1.- Discrimination as a decision.
6.2.- Discrimination as a description: discriminant factor analysis.
6.3.- MANOVA and determination of discriminant variables.
6.4.- Selection algorithms. Factoring and reclassification
6.5.- Application with SPSS

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	30,00
Classroom practices	30,00
Total hours	**60,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	40,00
Independent study and work	30,00
Preparation of lessons	0,00
Preparation for assessment activities	20,00
Resolution of case studies	0,00
Total hours	**90,00**

TEACHING METHODOLOGY

The teaching methodology will be varied and will use different approaches:

a) Exhibition sessions on the part of the professor of each one of the subjects of the program. In these sessions the concepts, analytical interdependencies, theoretical notions and key practical questions that the students must learn to handle will be explained.

b) Exhibition-participative sessions in which the teacher will interact with the students developing and guiding them in the handling of the analysis techniques and the computer tools for their implementation.

c) Group discussion and analysis sessions from different materials that aim to raise new questions about the contents of the subject's program and deepen understanding of the contents of the subject.

d) Realization of team or individual works for the elaboration of reports or the resolution of cases that the teaching staff may raise. The concrete guidelines for the realization of the possible works will be specified by the teachers in class according to the concerns and interests of the students and explained in detail in class. The student's work will be the object of orientation, follow-up and supervision by the faculty.

e) Possible attendance and active participation in conferences and / or seminars that are organized as complementary activities or related to the subject throughout the semester.

EVALUATION

It will be expressed by numerical rating in accordance with the provisions of the regulations (RD1125 / 2003 of September 5) by the that the European system of credits and the system of qualifications in the university qualifications of official character and validity in all the national territory are established.

The individual and team work carried out by the students throughout the course will be evaluated, both in terms of refers to the acquisition of specific and generic skills as in relation to the knowledge of the module.

The teaching staff, depending on the academic circumstances of the subject, will select one or more of the following instruments:

- Written exams: including objective or brief tests, essay, case resolution or other similar options.

- Oral exams: including oral tests, interview, debates or oral presentations in the classroom or other similar options.

- Completion of tasks and presentation of reports on specific issues that may arise during the course.

- Observation: application of observation scales and registration of the students' attitudes in the development of the tasks and activities related to the competences.

The specific criteria and processes that will be used for the evaluation, as well as their specific numerical weighting, will be a function of the number of students finally enrolled and will be advertised properly at the beginning of the course.

REFERENCES

- BIBLIOGRAFÍA DE REFERENCIA BÁSICA: CEACES, Proyecto (Contenedor Hipermedia de Estadística Aplicada a las Ciencias Económicas y Sociales). Universitat de València. ON LINE: http://www.uv.es/ceaces PÉREZ LÓPEZ,CESAR (2009):Técnicas Estadísticas Multivariantes con SPSS. Ed. Garceta PÉREZ LÓPEZ,CESAR (2013): Análisis Multivariante de datos. Ed. Garceta RUIZ-MAYA, L. (1995): Análisis Estadístico de Encuestas: Datos Cualitativos. Madrid: A.C. SANCHEZ CARRION, JUAN JAVIER (1999): Manual de Análisis Estadístico de los Datos. Madrid: Alianza. SANTODOMINGO, ADOLFO (1997): Introducción a la informática en la empresa. Ed. Ariel FERRAN, MAGDALENA. (2001): SPSS para Windows: Programación y Análisis Estadístico. Madrid: Mc Graw Hill.

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