

**COURSE DATA****DATA SUBJECT****Code:** 36362**Name:** Data Analysis**Cycle:** Undergraduate Studies**ECTS Credits:** 6**Academic year:** 2025-26**STUDY (S)**

Degree	Center	Acad. year	Period
1212 - Degree in Gastronomic Sciences	Facultat de Farmàcia i Ciències de L'alimentació	1	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1212 - Degree in Gastronomic Sciences	Mathematics	BASIC

COORDINATION

LLEDO BENITO JOSEP

SUMMARY

Analysis of data is a basic training subject that belongs to the Mathematics module. It is attached to the area of Quantitative Methods for the Economy and Business and is taught in the first semester of the first year of the degree in Gastronomic Sciences.

Data analysis is distinguished by its marked instrumental nature.

Interest of the subject Analysis of data for the professional future.

Among the various professional orientations of the studies, two predominate: those related to the direction and management of gastronomic companies, fundamentally linked to catering and related services, as well as to the management of the activity. In all these areas, it is necessary to use statistical techniques that allow summarizing and extracting the most outstanding characteristics of socioeconomic reality, making forecasts or predictions of future gastronomic activities, and finally, measuring the evolution or cause-effect relationships between gastronomic variables. In short, statistical techniques provide instruments that facilitate decision-making.

This course covers the main statistical tools necessary for the interpretation and use of gastronomic information. An extensive tour of descriptive statistical tools for the treatment of quantitative information is carried out. A topic is also devoted to the study of analysis methods for qualitative data that are so



important in the gastronomic sector.

Main contents of the subject:

- Gastronomic concepts and variables.
- Descriptive analysis.
- Two-dimensional / multidimensional analysis.
- Qualitative analysis.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

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

OTHER REQUIREMENTS

No prerequisites.

COMPETENCES / LEARNING OUTCOMES

1212 - Degree in Gastronomic Sciences

Analizar, sintetizar y resumir críticamente la información que se deriva de la observación de los fenómenos culinario y gastronómico.

DESCRIPTION OF CONTENTS

1. VARIABLES AND GASTRONOMIC DATA

1. Introduction.
2. Classification of variables and data.

2. ANALYSIS OF UNIDIMENSIONAL GASTRONOMIC DATA

1. Presentation of the data: frequency distributions, statistical tables and graphic representations.
2. Position measurements.



3. Dispersion and shape modes.
4. Atypical values and box diagram.
5. Concentration Measures.

3. ANALYSIS OF TWO-DIMENSIONAL GASTRONOMIC DATA

1. Two-dimensional frequency distribution and dispersion diagram.
2. Covariance and correlation.
3. Linear regression.
4. Analysis of the goodness of fit and prediction

4. QUALITATIVE ANALYSIS OF GASTRONOMY

1. Association between nominal variables
2. Correlation between ordinal variables

5. TEMPORAL SERIES

1. Components of a time series.
2. Trend analysis.
3. Analysis of seasonal variations. Seasonalization
4. Prediction.

6. INDEX NUMBERS AND VARIATION RATES

1. Types of index numbers: simple and complex.
2. Link and change base.
3. Deflation of statistical series of monetary values.
4. Variation rates.

WORKLOAD

**PRESENCIAL ACTIVITIES**

Activity	Hours
Theory	45,00
Computer classroom practice	15,00
Total hours	60,00

NON PRESENCIAL ACTIVITIES

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

TEACHING METHODOLOGY

Teaching in the theoretical sessions:

-Expositive classes with problem solving to illustrate the concepts explained in which students can participate in solving problems and exercises.

Teaching in practical sessions:

-Expositive classes in computer room to solve the proposed practices.

-class work groups.

-seminar on the computer programs necessary for the resolution of practices and the preparation of reports.

Tutorials:

-individualized and voluntary by the student to solve aspects related to theoretical teaching and solving problems and exercises in class.

-in group and volunteers to solve aspects related to the work that must be delivered during the course.

EVALUATION



The course uses the following skills assessment procedure.

Synthesis test: written test, consisting of an exam consisting of theoretical and / or theoretical-practical questions and / or problems especially the content of the subject that appears in the Academic Guide.

Practice and computer science test: problem solving exam using a computer tool with a weight of 10% over the final grade.

Continuous evaluation of each student: based on the participation and degree of involvement of the student in the teaching-learning process.

There will be two continuous assessment tests throughout the course so that if the student passes both, they are guaranteed at least the corresponding average grade.

By their very nature, continuous assessment activities are non-recoverable.

REFERENCES

- BEAMONTE, E: Apuntes de Análisis de Datos. Grado en Ciencias Gastronómicas. Ed. Reexpress, Valencia, 2015 MURGUI, J.S.; y otros: Ejercicios de Estadística: Economía y Ciencias Sociales. Ed. Tirant lo Blanch, València, 2002.
- LIND D.A, MARCHAL W.G y WATHEN S.A.: Estadística aplicada a los negocios y la economía. Ed. McGraw Hill, México, 2008 (13ª Edición). MARTÍN PLIEGO, F.J.: Introducción a la Estadística Económica y Empresarial. Ed. Thomson. Madrid, 2004 (3ª Edición). MONTIEL, A.M.; RIUS, F.; BARÓ F.J.: Elementos básicos de Estadística Económica y Empresarial. Ed. Prentice Hall, Madrid, 1997. NEWBOLD, P.: Estadística para los Negocios y la Economía. Ed. Prentice Hall, Madrid, 1997 (4ª Edición). NEWBOLD, P. y otros: Estadística para Administración y Economía. Ed. Pearson-Prentice Hall, Madrid, 2008 (6ª Edición).