Universidad Europea

1. BASIC DATA

Subject	Statistics
Titration	Bachelor's Degree in Marketing
School/ Faculty	Economic, Business and Communication Sciences
Course	1st
ECTS	6 ECTS
Character	Basic
Language/s	Spanish
Modality	Presencial /on line
Semester	First semester
Academic year	2024/2025
Coordinating Teacher	Maicol Ochoa

2. PRESENTATION

The general objective of the subject is to teach the student the most appropriate methods and techniques for both the search and the processing of data and information on economic-business variables from different national and international databases, so that after their interpretation it is possible to make decisions based on objective reasons. For this reason, the student is initiated to carry out the elaboration of descriptive analysis of data related to the economic-business reality. This analysis is essential for any business activity for decision-making in marketing and sales departments in any type of sector. During the development of the Bachelor's Degree in Marketing at the European University of Madrid, the objective is to acquire the following skills.

3. COMPETENCIES AND LEARNING OUTCOMES

Core competencies:

- CB01: Knowledge in an area of study that starts from the basis of general secondary education, and is usually found at a level that, although supported by advanced textbooks, also includes some aspects that involve knowledge from the forefront of their field of study.

Transversal competences:

- CT04: Ability to analyze and synthesize: be able to break down complex situations into their constituent parts; also evaluate other alternatives and perspectives to find optimal solutions. Synthesis seeks to reduce complexity in order to better understand it and/or solve problems

Specific competencies:

- CE07: Ability to apply the technical tools used in market research and take them as criteria in decision-making, respecting fundamental rights and equality between men and women
- CE13: Ability to analyse the economic and market data obtained, with criteria to decide how to guide information is relevant and how it can be used, obtaining correct conclusions.
- CE16 - Ability to use the mathematical tools necessary to solve economic problems and the use of basic methods of calculus, algebra and programming.
- CE24: Ability to intervene in multidisciplinary teams made up of people from different functional areas of the company and obtain from them the necessary resources in each situation

Learning outcomes:

- RA 1. Search and processing of information on economic-financial variables from different national and international databases.
- RA 2. Preparation of descriptive data analyses and reports related to the economic-business reality.

The table below shows the relationship between the competencies developed in the subject and the learning outcomes that are pursued:

Competences	Learning Outcomes
CB01, CT04, CE13	**RA 1.** Search and processing of information on economic-financial variables from different national and international databases.

CT04, CE07, CE13, CE16, CE24	**RA 2.** Preparation of descriptive data analyses and reports related to the economic-business reality.

4. CONTENTS

The subject is organized into five learning units:

Unit 1. Introduction to statistics

Unit 2. Frequency distribution

Unit 3. Position, dispersion, and shape measurements

Unit 4. Analysis of two-dimensional variables: quantitative-qualitative

Unit 5. Index numbers and concentration measures

5. TEACHING-LEARNING METHODOLOGIES

The following are the types of teaching-learning methodologies that will be applied:

FACE-TO-FACE MODALITY

• Cooperative learning (Face-to-face modality)
• Problem-Based Learning (PBL) (Face-to-face modality)
• Project-Based Learning (Face-to-face modality)
• Master classes (Face-to-face modality)

ONLINE MODE

• Cooperative learning (Online mode)
• Problem-Based Learning (PBL) (Online modality)
• Project-Based Learning (Online Modality)
 • Master classes through online seminar (Online mode)

6. TRAINING ACTIVITIES

The types of training activities that will be carried out and the student's dedication in hours to each of them are identified below:

Face-to-face modality:

Training activity	Number of hours
Master Lesson	30
Asynchronous Master Classes	10
Case Analysis and Problem Solving	20
Oral presentations of papers	10
Preparation of reports and writings	25
Freelance work	40
Group tutoring	10
Knowledge Tests	5
TOTAL	**150**

Modalidad on-line

Training activity	Number of hours
Webinar	10
Reading topics and consulting complementary resources	20
Individual application activities: problems, cases, projects	30
Collaborative application activities	20
Guardianship	20
Self-assessment quizzes and face-to-face knowledge tests	5
Autonomous study	40
Searching for resources and selecting sources of information	5
TOTAL	**150**

7. EVALUATION

The evaluation systems are listed below, as well as their weight on the total grade of the subject:

Face-to-face knowledge test	50%
Oral presentation. Reports and Briefs	10%
Case Analysis and Problem Solving	20%
Projects, reports and writings	20%
Total	100%

On the Virtual Campus, when you access the subject, you will be able to consult in detail the evaluation activities you must carry out, as well as the delivery dates and evaluation procedures for each of them.

7.1. Ordinary call

To pass the subject in the ordinary call, you must obtain a grade greater than or equal to 5.0 out of 10.0 in the final grade (weighted average) of the subject.

In any case**, it will be necessary for you to obtain a grade greater than or equal to 5.0 in activity 6 (final test), so that it can average with the rest of the activities**. If the grade of the final test is less than 5, the final grade will be the grade of said test.

This test is in no case liberatory in the event of not passing the subject in the ordinary call . **The final test will always be compulsory regardless of whether it was passed in the ordinary call.**

Late submissions of activities will not be accepted.

7.2. Extraordinary call

To pass the subject in the ordinary call, you must obtain a grade greater than or equal to 5.0 out of 10.0 in the final grade (weighted average) of the subject.

In any case, **it will be necessary for you to obtain a grade greater than or equal to 5.0 in activity 6 (final test), so that it can average with the rest of the activities. If the grade of the final test is less than 5, the final grade will be the grade of said test.**

The final test will always be compulsory regardless of whether it has been passed in the ordinary call.

The Virtual Campus will provide information about the activities that you must carry out to recover all those activities that have not been passed in the ordinary call or not delivered.

Late submissions of activities will not be accepted.

The regulations of the university will be followed with respect to plagiarism, and they will not be admitted.

8. SCHEDULE

This section indicates the schedule with delivery dates of assessable activities of the subject:

Face-to-face modality

Assessable activities	Date
Face-to-face knowledge test	Week of January 16 to 20, 2023
Delivery/defense of empirical work	Week of January 16 to 20, 2023
Case Analysis and Problem Solving (Critical Reading)	Week of January 16 to 20, 2023

Modalidad on-line

Assessable activities	Date
Activity 1: Search and interpretation of the data obtained	Week 2
Activity 2. Exercises Frequency distribution. Gretl and Excel	Week 4
Activity 3. Exercises Position Measurements . Gretl and Excel	Week 7
Activity 4 Exercises Measures of dispersion, shape and two-dimensional variables. Gretl and Excel	Week 10-13
Activity 5. Concentration measures and index numbers	Week 16

This schedule may be modified for logistical reasons of the activities. Any modification will be notified to the student in a timely manner.

9. BIBLIOGRAPHY

The reference works for the follow-up of the subject are:

- Gonick, L (2010). *Statistics in comics.* Publisher: Zendrera Zariquiey.Barcelona
- Huff, D (1954). *How to lie with statistics.* May 2015 edition.Editorial Crítica. Barcelona
- Martín Pliego, F.J (2004). *Introduction to Economic and Business Statistics.* 3rd Edition, Thomson AC. Madrid.

Recommended bibliography is indicated below:

- Calberg, Conrad (2014). *STATISTICAL ANALYSIS: Microsoft Excel 2013.* United States of America: Que.
- Carrascal, Ursicino (2011). *Descriptive statistics with Microsoft Excel* 2010.Madrid: Ra-Ma
- Casas-Sánchez, José Manuel and Santos, Julián (1999*). Introduction to Statistics for Economics.* Madrid: Ramón Areces, S.A.
- Kelmansky, Diana (2009). *STATISTICS FOR EVERYONE. Thinking strategies and tools for problem solving*. Collection: THE NATURAL SCIENCES AND MATHEMATICS. Autonomous City of Buenos Aires: Ministry of Education of the Nation. National Institute of Technological Education.
- Malhotra, N (2008). Market research. Mexico. Prentice Hall Editions.
- Montero, José Mª (2007). *Descriptive Statistics*. Madrid: THOMSON.
- Peña, Daniel (2013). *FUNDAMENTALS OF STATISTICS*. Madrid: Alianza Editorial.
- Pérez, César (2012): *APPLIED STATISTICS. CONCEPTS AND EXERCISES THROUGH EXCEL.* GARCETA EDITORIAL GROUP

Specific bibliography Unit 5:

• INEbase / Economy / Economic accounts / Quarterly national accounts of Spain: main aggregates (CNTR) / Latest data. Quarterly National Accounts of Spain (CNTR).

• INEbase / Standard and living conditions (CPI) / Consumer and housing price indices / Consumer price index / Latest data. Consumer Price Index

•INEbase / Industry, energy and construction /Industry and energy /Industrial price indices / Latest data. Industrial Price Index

• INEbase / Labour market / Wages and labour costs / Quarterly labour cost survey / Latest data. ETCL

• < http://docplayer.es/21157531-La-curva-de-lorenz-y-el-indice-de-gini.html >

• < https://datos.bancomundial.org/indicador/SI.POV.GINI >

10. EDUCATIONAL GUIDANCE, DIVERSITY AND INCLUSION UNIT

From the Educational Guidance, Diversity and Inclusion Unit (ODI) we offer support to our students throughout their university life to help them achieve their academic achievements. Other pillars of our action are the inclusion of students with specific educational support needs, universal accessibility on the different campuses of the university and equal opportunities.

This Unit offers students:

Accompaniment and follow-up through the realization of personalized counseling and plans for students who need to improve their academic performance.

In terms of attention to diversity, non-significant curricular adjustments are made, that is, at the level of methodology and evaluation, in those students with specific educational support needs, thus pursuing equality of opportunities for all students.

We offer students different extracurricular training resources to develop various skills that will enrich them in their personal and professional development.

Vocational guidance through the provision of tools and advice to students with vocational doubts or who believe that they have made a mistake in the choice of degree.

Students who need educational support can write to us at:

orientacioneducativa@universidadeuropea.es

11. SATISFACTION SURVEYS

Your opinion matters!

The European University encourages you to participate in satisfaction surveys to detect strengths and areas for improvement in the teaching staff, the degree and the teaching-learning process.

The surveys will be available in the survey space of your virtual campus or through your email.

Your assessment is necessary to improve the quality of the degree.

Thank you very much for your participation.