DEGREE CURRICULUM
BASIC STATISTICS

Coordination: TRUJILLO BAUTE, ELISA-MARGARITA

Academic year 2023-24

BASIC STATISTICS 2023-24

Subject's general information

Subject name	BASIC STATISTICS
Code	101308
Semester	2nd Q(SEMESTER) CONTINUED EVALUATION

Typology	Degree	Course	Character	Modality
	Bachelor's Degree in Business Administration and Management	1	COMMON/CORE	Attendance-based
	Double bachelor's degree: Degree in Business Administration and Management and Degree in Tourism	2	COMMON/CORE	Attendance-based
	Double bachelor's degree: Degree in Law and Degree in Business Administration and Management	2	COMPULSORY	Attendance-based

Course number of credits (ECTS)	6

Type of activity, credits, and groups	Activity type	PRAULA	TEORIA
	Number of credits	2.4	3.6
	Number of groups	3	3

Coordination	TRUJILLO BAUTE, ELISA-MARGARITA
Department	ECONOMICS AND BUSINESS
Teaching load distribution between lectures and independent student work	40% presential (60 h.) 60% autonomy work (90 h.)
Important information on data processing	Consult this link for more information.
Language	Catalan

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
CASALS ROMA, MONTSERRAT	montserrat.casals@udl.cat	18	
TRUJILLO BAUTE, ELISA-MARGARITA	elisa.trujillo@udl.cat	0	

Subject's extra information

Without Translate-Assignatura bàsica de primer curs en els estudis d'Administració i Direcció d'Empreses.

Learning objectives

- Use the appropriate statistical terminology in solving economic and business problems.

- Use basic ICT resources to follow the subject.

- Use effectively different computer programs for the descriptive statistical treatment of data.

- Recognize the different types of data and the most appropriate descriptive techniques for their statistical analysis.

- Adequately calculate the different summary statistical measures of a data set at both one-dimensional and two-dimensional level.

- Calculate index numbers and apply time series analysis techniques.

- Use elements of theoretical statistics to assess the possibility of occurrence (probability) of a given random phenomenon.

- Identify the characteristics of discrete and continuous probability distributions and stochastic convergence theorems.

- Properly interpret tables and graphs to synthesize a large number of information, one-dimensional and two-dimensional.

- Develop tables and graphs as a tool to synthesize information at one-dimensional and two-dimensional level.

Competences

General or basic competences (CB)

CB 1. Ability to analyze and synthesize.

CB 2. Ability to organize and plan.

CB 3. Capacity for criticism and self-criticism.

CB 4. Be able to work and learn autonomously and, at the same time, interact appropriately with others through

cooperation and collaboration.

CB 5. Act in attention to rigor, personal commitment and with a focus on quality.

Specific competences (CES)

CES 3. Prepare, interpret and audit the economic and financial information of entities and individuals, and provide advice in this regard.

CES 4. Apply instrumental techniques in the analysis and solution of business problems and in decision making.

University strategic competencies (CEU)

CEU 1. Correct oral and written expression.

CEU 3. Mastery of ICT.

Subject contents

Topic 1. Introduction to statistics

    1.1. Concept and content of statistics.

    1.2. The statistical analysis process.

    1.3. Business and economic applications.

    1.4. Data. Data classification.

    1.5. Computing tools for statistical data analysis.

Topic 2. Unidimensional descriptive analysis

    2.1. Frequency distribution.

    2.2. Measurements of position.

    2.3. Measurements of dispersal.

    2.4. Other descriptive measurements.

    2.5. Transforming variables. Properties and typing.

Topic 3. Bidimensional descriptive analysis

    3.1. Frequency distribution.

    3.2. Marginal and conditional distributions. Independence.

    3.3. Association between two variables. Covariance and correlation.

    3.4. Linearregression. Determination coefficient.

    3.5. Association between two attributes. Contingency table.

Topic 4. Indices and time series

4.1. Concept and classification of index numbers.

4.2.Calculation of principal economic indices.

4.3.Properties and operations with indices.

4.4. Concept of time series.

4.5.Analysis of the components of a time series.

Topic 5. Calculation of probabilities

5.1.Measurement of probability. Axiomatics and properties.

5.2.Conditional probability. Intersection theorem.

5.3.Independence of events.

5.4. Total probability theorem. Bayes' theorem.

Topic 6. Probability models

6.1.Definition of random variable.

6.2.Characteristics of a random variable.

6.3.Discrete distributions.

6.4.Continuous distributions.

6.5.Stochastic convergence theorems.

Methodology

Face-to-face activities:

Presentation of the content of the topics with explanation of the theory and resolution of exercises.

Practical classes: approach and resolution of activities, according to the size of the group, using different computer programs.

Tutoring: review of the contents and resolution of doubts.

Non-contact activities: Study by the student of the theory, resolution of examples, exercises and activities, manually and with computer support and preparation of the evaluation tests.

Development plan

Weeks	Descriptions	
1-8	Subject presentation and lessons 1,2, 3 and 4	Explanation of the contents, methodology, materials and evaluation
9	2nd. Evaluation activity: Lessons 1, 2, 3 and 4	

10-15	Lessons 5, 6 and 7	Explanation of the contents, methodology, materials and evaluation
16-17	3rd. Evaluation activity: Lessons 4,5 and 6	
19	Recovery activity	

Evaluation

Activities	%	Dates	O/V (1)	I/G (2)	
Activity (A1)	20	Week 4	O	I	Continuos work
Activity (A2)	40	Week 9	O	I	Written test to assess the monitoring of topics 1,2,3 and 4
Activity(A3)	40	Week 16-17	O	I	Written test to assess the monitoring of subjects 5, 6 and 7
Activity (A4)		Week 19 (recovery)	O	I	Written recovery test 2a. and/or 3a. test

Evaluation criteria

The first activity (A1) has a weight of 20%, the second (A2) 40% and the third (A3) 40% of the final grade. Failure to present in any of the assessment activities will result in a grade of zero in the activity not presented. Each activity presented will have a grade from 0 to 10. The subject will be considered passed with a weighted average grade between 5 and 10.

The fourth activity (A4) is recovery and is aimed at students who have not passed the continuous assessment. They will have to take the examination of the content of activity 2 and activity 3, in which they have not reached a grade of 5 out of 10.

Clarifications

The student who only obtains a grade in one of the three tests and who does not appear in A4 of this subject will obtain the grade of NOT PRESENTED. If the number of assessment activities presented is two or more, the final grade will be the weighted arithmetic average of the tests.

Alternative evaluation

In the event that a student documents his/her inability to attend the activities scheduled within the continuous assessment (due to paid work, second or subsequent enrollment in the subject, reconciliation of work and family life and mobility stays) may opt for a single test to validate skills and knowledge that will be carried out on the day and at the time established in the Degree assessment calendar for the final test of the ordinary assessment.

The request for this evaluation modality must be made before March 18, 2024 with documentary evidence and, once made, it cannot be modified. The date of this unique test will be week 16 or 17 and its recovery will be week 19, according to the calendar on the website of the Degree in ADE.

On the website of the Faculty there is the document that the students must fill out and hand in to the teacher

responsible for the subject

http://www.fdet.udl.cat/export/sites/Fdet/ca/.galleries/Documents/Secretaria-documents/Sollicitud-davaluacio-alternativa.pdf

Carrying out the tests

You must come to the tests with an official document that proves the student's identity (DNI, Passport,...) and it is not possible to bring unauthorized electronic devices to the tests (mobile phones, programmable calculators,...).

According to art. 3.1 of the UdL assessment regulations, the student may not, under any circumstances, use unauthorized means or fraudulent mechanisms during the assessment tests. The student who uses any fraudulent means related to the test and/or brings electronic devices not allowed in any of the evaluation tests, will have to leave the exam or the test, will have the qualification of SUSPENSION, in the subject and will be subject to the consequences provided for in these regulations or in any other internal regulation of the UdL.

Bibliography

- Virtual campus Sakai

- Biblioguies Grau en Administració i Direcció d'Empreses https://biblioguies.udl.cat/ade

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- Lind, Marchal i Wathen. *Estadística aplicada a los negocios y la economia*. McGraw-Hill, 2017

- Murray R. Spiegel. Estadística Serie Schaum. McGraw-Hill, 2020:
https://www.yumpu.com/es/document/read/63022012/estadistica-serie-schaum-4ta-edicion-murray-r-spiegelpdf-1

-: https://discovery.udl.cat/iii/encore/record/C__Rb1362071?lang=cat

- http://onlinestatbook.com