



Universitat de Lleida

DEGREE CURRICULUM

BASIC STATISTICS

Coordination: GÓMEZ ADILLÓN, MARÍA JESÚS

Academic year 2021-22

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	Attendance-based
	Double bachelor's degree: Degree in Business Administration and Management and Degree in Tourism (ADETUR)	2	COMMON	Attendance-based
	Double bachelor's degree: Degree in Law and Degree in Business Administration and Management	2	COMPULSORY	Attendance-based
	Grau en Administració i Direcció d'Empreses - Igualada	1	COMMON	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	4		4
Coordination	GÓMEZ ADILLÓN, MARÍA JESÚS			
Department	APPLIED ECONOMICS			
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			

Distribution of credits

Josep Domingo Daza 6
M^a Jesús Gómez Adillón 12
Joan Baró Linàs 6

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
DOMINGO DAZA, JOSEP F.	josep.domingo@udl.cat	6	
GÓMEZ ADILLÓN, MARÍA JESÚS	mjesus.gomez@udl.cat	12	
PAGÈS BERNAUS, ADELA	adela.pages@udl.cat	1,35	
TRUJILLO BAUTE, ELISA-MARGARITA	elisa.trujillo@udl.cat	4,65	

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. Linear regression. 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	Presentación assignatura y Temas 1,2, 3 y 4	Explicación de los contenidos, metodología, materiales y evaluación
5	1a. Actividad de evaluación: Temas 1 y 2	Explicación teoría y resolución de problemas
9	2a. Actividad de evaluación: temas 1, 2, 3 y 4	
10-15	Temas 5, 6 y 7	Explicación teoría y resolución de problemas
16-17	3a. Actividad de evaluación: temas 5, 6 y 7	
19	4a. Actividad de recuperación	

Evaluation

	%	Dates	O/V (1)	I/G (2)	
1a. Activity (A1)	10	4 week	O	I	
2a. Activity (A2)	40	9 week	O	I	
3a. Activity (A3)	50	16-17weeks	O	I	
4a. Activity (A4)		19 week	O	I	.

Evaluation criteria

Failure to appear in any of the evaluation activities will obtain a grade of zero in the activity not submitted. Each activity presented will have a mark of 0 to 10. It will be considered passed the subject with an average mark of the two tests between 5 and 10.

The activity (A4) is recovery and is aimed at students who have not passed the continuous assessment.

They will have to examine the content of those evaluations in which they have not reached the mark of 5 out of 10.

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

Alternative evaluation In the event that a student documents his / her impossibility to attend the scheduled activities within the continuous assessment (for paid work, second or subsequent enrollment of the subject, conciliation of work and family life and mobility stays), he / she may choose for a single test of validation of competencies and knowledge that will be carried out on the day and at the time established in the evaluation calendar of the Degree for the final test of the ordinary evaluation.

The application for this evaluation modality must be made before March 18, 2022 with documentary proof and, once made, 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 of the degree website in ADE.

On the website of the Faculty is the document that must be filled out by students and delivered to the professor 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 The tests must be accompanied by an official

document proving the student's identity (DNI, Passport, ...) and it is not possible to bring to the tests unauthorized electronic devices (mobile telephony, programmable calculators, ...).

In accordance with art. 3.1 of the UdL evaluation regulations, the student may not use, in any case, during the performance of the evaluation tests, unauthorized means or fraudulent mechanisms. The student who uses any fraudulent means related to the test and / or carries electronic devices not allowed in any of the evaluation tests, will have to leave the examination or the test, will have the qualification of SUSPENDED, in the subject ii will be subject to the consequences provided for in these regulations or in any other internal regulations of the UdL.

Bibliography

- Virtual campus vSakai (2021/22)
- Biblioguies Grau en Administració i Direcció d'Empreses <https://biblioguies.udl.cat/ade>
- Newbold, Paul, i altres. *Estadística para administración y economía*, Ed. Prentice Hall, 2013: https://discovery.udl.cat/iii/encore/record/C__Rb1362575?lang=cat
- Lind, Marchal i Wathen. *Estadística aplicada a los negocios y la economía*. 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>
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