

Applied Statistics

Code: 103746
ECTS Credits: 6

Degree	Type	Year	Semester
2502904 Hotel Management	FB	1	2

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

Contact

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Use of Languages

Principal working language: spanish (spa)
Some groups entirely in English: No
Some groups entirely in Catalan: No
Some groups entirely in Spanish: Yes

Prerequisites

There are no prerequisites

Objectives and Contextualisation

1. Give the student the indispensable statistical work tools.
2. Knowledge on the part of the student of the parameters and statistical calculations, with special attention to its application to the world of Hospitality.
3. Acquisition of criteria when making a statistical study. Know which variables are the most appropriate for a quantitative study.
4. Familiarization with the calculations to be made and with the statistical treatment of the information obtained in a study.
5. Know how to interpret the results.
6. Application of Statistics in fields such as Marketing or Management.
7. Creation of work criteria

Competences

- Adapt to changes in technology as they occur.
- Analyse, diagnose and support and take decisions on the organisational structure in the hotel and catering sector.
- Be able to self-evaluate knowledge acquired.
- Demonstrate broad knowledge of the organisation and management of company operations, with emphasis on applied management models and the application of quantitative and qualitative techniques.
- Develop a capacity for independent learning.
- Manage and organise time.
- Manage communication techniques at all levels.
- Work in teams.

Learning Outcomes

1. Adapt to changes in technology as they occur.
2. Analyse and qualitative and interpret quantitative information regarding management models in the tourism sector.
3. Analyse, data, populations and samples, tables and graphs, and the association between variables, to be able to value the economic dimension of tourism.
4. Be able to self-evaluate knowledge acquired.
5. Collect, present and analyse qualitative and quantitative information referring to the tourist sector.
6. Develop a capacity for independent learning.
7. Identify referential situations in the tourist sector characterised by randomness and analyse them using basic probability tools.
8. Manage and organise time.
9. Manage communication techniques at all levels.
10. Work in teams.

Content

- 1.- Preliminary concepts
 - a) Meaning of term "Statistics"
 - b) Population and sample
 - c) Absolute frequency, relative frequency and accumulated frequency.
- 2.- Statistical tables and graphic representations
 - a) Obtaining data through questionnaires.
 - b) Tabulation. Statistical series.
 - c) Bar diagrams, histograms and sector diagrams.
 - d) Other graphic representations.
- 3.- Parameters of centralization
 - a) Characteristics of the central value.
 - b) Arithmetic, weighted, median and fashion average.
- 4.- Dispersion parameters
 - a) Concentration and dispersion.
 - b) Standard deviation and coefficient of variation.
- 5.- Regression
 - a) Adjustment and regression concepts.
 - b) The method of least squares. Regression coefficient.
 - c) Application to time series.
 - d) Other adjustment methods.
- 6.- Random variables and their distributions
 - a) Discrete random variables.
 - b) Continuous distributions
 - c) Normal distribution.
 - d) Functions of two random variables.
 - e) Covariance and correlation
- 7.- Sampling
 - a) Introduction.
 - b) Sample sum.
 - c) Theory of the central limit.
 - d) Theory of sampling.
 - e) Sampling of small population

Methodology

During the course there will be two clearly differentiated methodological dynamics:

- 1) Lectures: Exhibition of the theoretical content of the program in a clear, systematic and organized by the teacher. The students will have in the Virtual Campus of the Interactive Autonomous the basic notes and problem sheets of all the topics. The participation of the student will be encouraged at all times: their contributions, comments, doubts, proposals will be valued ...

2) Practical classes: Parallel to the master classes, once a minimum knowledge is reached, a series of practical application exercises will be proposed. These exercises will be carried out in groups of 2-3 students and will be presented in class, using the relevant computer resources (PowerPoint, Excel, Word ...). To guide and evaluate the corresponding group work, the corresponding on-line and on-line tutorials will be carried out.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Master Classes	50	2	1, 3, 2, 6, 9, 8, 7, 5, 4, 10
Type: Supervised			
Tutorships	45	1.8	1, 3, 2, 6, 9, 8, 7, 5, 4, 10
Type: Autonomous			
Practical works	25	1	1, 3, 2, 6, 9, 8, 7, 5, 4, 10
Study	25	1	1, 3, 2, 6, 9, 8, 7, 5, 4, 10

Assessment

THREE EVALUATION OPTIONS

A) CONTINUOUS EVALUATION

The continuous evaluation system involves the periodic presentation of work and activities, individual and group, in addition to the completion of two partial examinations of consolidation of the concepts and topics developed in class with a value for each of 40% of the grade. end of the subject. To be able to average the results obtained in these two partial exams, the student must achieve a minimum score equal to or higher than 4 points in both exams.

In the Virtual Campus will be detailed the dates of delivery of the works and the completion of the two partial exams.

Students who do not pass the subject through continuous assessment will be evaluated by the single evaluation system, not taking into account the grades obtained before.

B) UNIQUE EVALUATION: Final exam (all subject).

Set date and time, according to academic calendar, in the Official Center Programming (UETDH).

There will be a single type of final exam, without differentiations between students who have passed the continuous assessment and those who have not.

C) RE-EVALUATION:

Set date and time, according to academic calendar, to the Official Center Programming (EUTDH).

Students who in the final evaluation have obtained a grade equal to or greater than 4 and less than 5, may be presented for re-evaluation. The maximum rating of this re-evaluation will not exceed 5 as a final grade. Type of test to be determined.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Midterm exam 1	40%	2.5	0.1	1, 3, 2, 6, 9, 8, 7, 5, 4, 10
Midterm exam 2	40%	2.5	0.1	1, 3, 2, 6, 9, 8, 7, 5, 4, 10
Practice Sessions	20%	0	0	1, 3, 2, 6, 9, 8, 7, 5, 4, 10

Bibliography

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SANTIAGO FERNÁNDEZ, ALEJANDRO CÓRDOBA i JOSÉ MARÍA XAI. *Estadística Descriptiva*. Ed ESIC

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