

# 27609 - Statistics I

#### Información del Plan Docente

Academic Year	2016/17
Academic center	109 - Facultad de Economía y Empresa
Degree	450 - Degree in Marketing and Market Research
ECTS	6.0
Course	1
Period	Second semester
Subject Type	Basic Education
Module	

- 1.Basic info
- 1.1.Recommendations to take this course

#### 1.2. Activities and key dates for the course

- 2.Initiation
- 2.1.Learning outcomes that define the subject
- 2.2.Introduction
- 3.Context and competences
- 3.1.Goals
- 3.2.Context and meaning of the subject in the degree
- 3.3.Competences
- 3.4.Importance of learning outcomes
- 4.Evaluation
- 5. Activities and resources
- 5.1. General methodological presentation

#### 5.2.Learning activities

#### 5.3.Program

Lesson 1: Statistical Methods in Business and Economics

Introduction. Historical Evolution. Concept of Estadístics. The statistical method. Statistics in Business and Economics



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Lesson 2: Scales of Measurement and Information Sources

Introduction. Information Sources. Basic Concepts. Data and variables. Scales of Measurement.

Lesson 3: Describing Univariate Data: Frequency Tables and Graphic Presentation.

Frequency Tables. Graphical Presentations

Lesson 4: Describing Univariate Data: Numerical Measures

Introduction. Location measures. Variability measures. Skewness and Curtosis. Boxplot diagrammes. Other measures.

Lesson 5: Describing Bivariate Data: Frequency Tables and Graphic Presentation

Introduction. Joint, marginal and conditional frequencies distributions. Independence. Graphical Presentations.

Lesson 6: Correlation and Simple Linear Regression

Introduction. Scatter Diagrammes. Covariance and correlation. Linear regression simple: least squares criterion. Goodness of fit and correlation. Prediction. Non-linear regression.

Lesson 7: Indices Numbers

Introduction. Simple and complex indices. Deflation economic series. Link and change of base. Repercussion. Some notable economic índices.

Lesson 8: Probability

Introduction. Concept of Probability: Kolmogorov axiom's. Laplace rule. Combinatorics. Conditional Probability. Theorem of total probability. Theorem of Bayes.

Lesson 9: Statistical Decision Theory

Introduction. Setting-up a decisión problem. Decision Making under total and partial uncertainty. Bayes rule. Value and efficiency of the information.

#### 5.4. Planning and scheduling

### 5.5.Bibliography and recomended resources