

BUSINESS MANAGEMENT (LM01)

(Lecce - Università degli Studi)

Teaching STATISTICS FOR BUSINESS

GenCod A003654

Owner professor Leonardo MARIELLA

Teaching in italian STATISTICS FOR BUSINESS

Teaching STATISTICS FOR BUSINESS

SSD code SECS-S/01

Reference course BUSINESS MANAGEMENT

Course type Laurea Magistrale

Credits 6.0

Teaching hours Ore-Attività-frontale: 48.0

For enrolled in 2017/2018

Taught in 2018/2019

Course year 2

Language INGLESE

Curriculum CONTROLLO DI GESTIONE

Location Lecce

Semester Primo-Semestre

Exam type Orale

Assessment Voto-Finale

Course timetable
<https://easyroom.unisalento.it/Orario>

BRIEF COURSE DESCRIPTION

The course explains the most commonly used statistical methods such as support for managerial decisions.

REQUIREMENTS

Elements of Statistics and Business Economy

COURSE AIMS

The teaching is intended to provide the student with:

- specific knowledge of the most frequently used statistical methods to deal with and analyze problems in the business environment;
- in order to facilitate understanding all the techniques are applied to specific cases;
- the autonomy of judgment and the intuitive ability of the student are stimulated through the solution of problems to be dealt with autonomously or through activities for small groups;
- in order to form communication skills and verify learning skills, solved problems are exposed by the students to the classroom

TEACHING METHODOLOGY

Lectures with use of audiovisual supports, exercises in the classroom

ASSESSMENT TYPE

Oral examination with resolution of specific problems

FULL SYLLABUS

Main sources of Business Statistics:

- o Internal sources for data collection
- o The National Statistical System and external sources
 - * The National Statistical System
 - * External sources for data collection
- o Other databases
 - * The databases of Cerved Group s.p.a

Descriptive Statistics:

- * Collective and statistical features
- * Tables and graphs
- * Statistical indexes
- * Balance indexes
 - o Composition indexes
 - o Balance indexes and turnover ratios
 - o Profitability ratios

Position and variability of distributions:

- * Position indexes
 - o Modal value
 - o Median value
 - o Mean and trimmed mean
- * Variability indexes
 - o Accuracy of modal value
 - o Accuracy of median value
 - o Accuracy of mean
- * The Delphi method and its variants
 - o Features of the expert panel
 - o Features of the method
 - * Some variants of the Delphi method

Empirical distribution function and indices:

- * Empirical distribution function
- * Position and empirical distribution function
 - o Quantile values
 - o Half sum of quantile values
- * Variability and empirical distribution function
 - o Interquantile range
- * The Shang method

Index numbers:

- * Simple index numbers
- * Composite index numbers
- * Weighted composite index numbers
- * Business productivity
 - o Analysis of the output of a process
 - o Analysis of the inputs of a process
 - o Partial productivity indices
 - o Overall productivity indexes
- * Temporal and spatial analysis of business productivity

Analysis of interdependence:

- * Independence
- * Statistical connection between two features
- * Cogradauation and correlation between two features
- * Customer features

Analysis of dependence:

- * Mean-independence
- * Linear regression model
- * Break even analysis
- * Convenience analysis
- * Multiple linear regression model
- * Generalized break even analysis
- * Balance analysis

Inference Statistics:

- * Population and sample
- * Features of an infinite population
 - o Sampling from infinite populations
 - o Estimating of an infinite population parameters
- * Control charts
 - o Control charts for attributes
 - o Control charts for variables
- * Features of an finite population
 - o Sampling from finite populations
 - o Estimating of an finite population parameters
- * Sampling techniques in auditing
 - o Estimation sampling
 - o Discovery sampling

REFERENCE TEXT BOOKS

L. MARIELLA, M. TARANTINO. Statistica Aziendale per il Controllo di Gestione. McGraw-Hill Education (Italy), Milano, gennaio 2013.