UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Scienze Economiche, Aziendali e Statistiche
ACADEMIC YEAR	2017/2018
BACHELOR'S DEGREE (BSC)	ECONOMICS AND FINANCE
SUBJECT	STATISTICS 1
TYPE OF EDUCATIONAL ACTIVITY	B
AMBIT	50182-Statistico-matematico
CODE	06647
SCIENTIFIC SECTOR(S)	SECS-S/01
HEAD PROFESSOR(S)	AUGUGLIARO LUIGI Professore Ordinario Univ. di PALERMO
OTHER PROFESSOR(S)	
CREDITS	8
INDIVIDUAL STUDY (Hrs)	128
COURSE ACTIVITY (Hrs)	72
PROPAEDEUTICAL SUBJECTS	04897 - GENERAL MATHEMATICS
MUTUALIZATION	
YEAR	2
TERM (SEMESTER)	1° semester
ATTENDANCE	Not mandatory
EVALUATION	Out of 30
TEACHER OFFICE HOURS	**AUGUGLIARO LUIGI** Tuesday 10:00 12:00 Stanza n. 201 - secondo piano

PREREQUISITES	The full understanding of the arguments of the discipline requires the knowledge about the properties of algebraic operations and some notions of mathematical analysis, i.e. the derivative of a function, the limit of a function and the problem of determining the minimum of a function.
LEARNING OUTCOMES	Knowledge and ability to understand At the end of the course, the student will acquire the terminology of the discipline in order to use it in the analysis of an economic data-set; the student will acquire the fundamental tools own of the Descriptive Statistics, it will be able to choose and apply the adequate statistical indices with respect to the type of data that will be analyzed; It will be also introduced the basic notion of the statistical inference. Capacity to apply knowledge and understanding At the end of the course, the student will be able to distinguish the different type of data; to identify the nature of the data available for the analysis; he will be able to use the main statistical indices of descriptive statistics; he will be able to study the dependence structure between two variables in order to make decisions under uncertainty. Making judgments At the end of the course, the student will be able to do a descriptive analysis of a data-set drawn from a population; to be able to extract and summarize informations from a data-set; to be able to choose the type of dependence between two variables. Communication skills At the end of the course, the student will be able to comunicate the results coming from a descriptive or inferential analysis by means of simple reports; the student will be able to comunicate the obtained results justifying, from a theoretical point of view, the statistical tools used for the analysis. Learning skills At the end of the course, the student will be able to understand the results from a statistical analysis; he will be able to re-elaborate the obtained results.
ASSESSMENT METHODS	The assessment of the examinee's preparation is obtained by a written exam and, in case of positive evaluation, an oral exam. The duration of the written exam is of two hours and it is composed of three exercises and an open question. It is structured in order to make comparable the answers given by the students. The exercises are structured with the aim to verify the knowledge of the statistical tools studied during the course; to this end, they are structured in a clear form, are uniquely interpretable and require the application of the most appropriate statistical indices. The aim of the open question is to verify the knowledge of the theoretical foundations of the discipline; it requires the proof of a theoretical property of a statistical index chosen during the design of the written exam. The evaluation of the written exam is negative if the student does not show the knowledge of the main notions studied during the course. In this case the student is failed. If the written exam is evaluated positively, the student must take an oral exam structured in two parts. In the first part, the student will discuss the errors done in the written exam while in the second part the student will have to answer at least two/three oral questions on the whole program of the course. The final assessment aims to evaluate whether the student has the knowledge and understanding of the topics of the discipline. The student will take a positive evaluation whether he shows a full comprehension of the main arguments of the discipline and, at the same time, his presentation skills allow the transmission of his knowledge to the examiner. Below this threshold, the exam will be evaluated insufficient. Final assessment is graded on a scale the goes from zero to thirty points and it is obtained as sum of the evaluation of the written exam (up to 25/30) and the oral exam (up to 5/30).
EDUCATIONAL OBJECTIVES	Aim of the course is the introduction to the basic Statistical concepts, a discipline seen, in general, as fundamental in the scientific method of acquiring knowledge. It is well known that it is impossible to do an adequate economic analysis without the knowledge of the statistical tools necessary of to do a quantitative analysis. To this end, the course will be focused on that part of the Statistical theory known as "Descriptive Statistics" which give us the practical and theoretical tools by means of to describe and summarize the features of an economic data-set.
TEACHING METHODS	Lectures and classroom exercises.
SUGGESTED BIBLIOGRAPHY	

	Appunti forniti dal docente. S. Borra e A. di Ciaccio (2014) Statistica: metodologie per le scienze economiche e sociali. McGraw-Hill Education (Italy) srl F. Mecatti (2015) Statistica di base: come, quando, perche. McGraw-Hill Education (Italy) srl

SYLLABUS

Hrs	Frontal teaching
12	Introduction to Descriptive Statistics, types of statistical data, graphs and frequency distribution tables, index number.
12	Descriptive summary measures from a frequency distribution: averages and measures of variability.
10	Comparison between empirical and theoretical distribution.
14	Correlation and statistical dependence.

Hrs	Practice
6	Types of statistical data, graphs and frequency distribution tables.
6	Averages and measures of variability.
4	Comparison between empirical and theoretical distribution.
8	Correlation and statistical dependence.