UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Scienze Economiche, Aziendali e Statistiche
ACADEMIC YEAR	2015/2016
MASTER'S DEGREE (MSC)	BUSINESS ECONOMIC SCIENCES
SUBJECT	STATISTICAL METHODS
TYPE OF EDUCATIONAL ACTIVITY	B
AMBIT	50585-Statistico-matematico
CODE	18126
SCIENTIFIC SECTOR(S)	SECS-S/01
HEAD PROFESSOR(S)	MUGGEO VITO MICHELE ROSARIO Professore Ordinario Univ. di PALERMO
OTHER PROFESSOR(S)	
CREDITS	6
INDIVIDUAL STUDY (Hrs)	108
COURSE ACTIVITY (Hrs)	42
PROPAEDEUTICAL SUBJECTS	
MUTUALIZATION	
YEAR	1
TERM (SEMESTER)	2° semester
ATTENDANCE	Not mandatory
EVALUATION	Out of 30
TEACHER OFFICE HOURS	**MUGGEO VITO MICHELE ROSARIO** Tuesday 10:00 12:00 stanza 217 2° piano

DOCENTE: Prof. VITO MICHELE ROSARIO MUGGEO

PREREQUISITES	
LEARNING OUTCOMES	Conoscenza e capacità di comprensione 1. Knowledge of methods and models for the analysis of multivariate data; 2. Understanding of the questions which can be answered by means of such methods and models; Capacità di applicare conoscenza e comprensione 1. Ability to properly select methods for dealing with specific problems. 2. Ability to interpret the results obtained. Autonomia di giudizio 1. Critical understanding of features, potentials and limitations of statistical methods and models used for multivariate data analysis; Abilità comunicative 1. Ability to discuss features and issues of practical problems and to comment the obtained results. 2. Ability to write a scientific-technical report, focussed on the subject-matter problem tackled, illustrating the chosen method and the results obtained. Capacità d'apprendimento 1. Ability to use, in an integrated way, the notions acquired in previous Statistics course. 2. Ability to consult and understand the international literature on multivariate data analysis, in order to update knowledge and technical skills.
ASSESSMENT METHODS	prova orale
EDUCATIONAL OBJECTIVES	This course aims at providing the theoretical and applicative know-how of the student in the area of multivariate data modelling. The theoretical part, taught in the front classes, will be complemented from the applications point of view in laboratory tutorials. After attending this course, students should be able: to specify the appropriate statistical method to analyze economical data for the current problem at hand, and to interpret final results.
TEACHING METHODS	lezioni, laboratorio
SUGGESTED BIBLIOGRAPHY	Everitt, B.S. (2005). An R and S-Plus Companion to Multivariate Analysis. Springer. companion website

SYLLABUS

Hrs	Frontal teaching
4	introduction: statistical methods and inference
6	principal component analysis
6	canonical correlation analysis
6	discriminant analysis
8	regression analysis: the linear and logit models

Hrs	Others
12	Examples and discussions relevant to the aforementioned methods