UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Scienze Economiche, Aziendali e Statistiche
ACADEMIC YEAR	2017/2018
BACHELOR'S DEGREE (BSC)	ECONOMICS AND FINANCE
SUBJECT	ECONOMETRICS
TYPE OF EDUCATIONAL ACTIVITY	B
AMBIT	50183-Economico
CODE	02694
SCIENTIFIC SECTOR(S)	SECS-P/05
HEAD PROFESSOR(S)	LO CASCIO IOLANDA Professore Associato Univ. di PALERMO
OTHER PROFESSOR(S)	
CREDITS	8
INDIVIDUAL STUDY (Hrs)	128
COURSE ACTIVITY (Hrs)	72
PROPAEDEUTICAL SUBJECTS	
MUTUALIZATION	
YEAR	3
TERM (SEMESTER)	2° semester
ATTENDANCE	Not mandatory
EVALUATION	Out of 30
TEACHER OFFICE HOURS	**LO CASCIO IOLANDA** Friday 10:00 12:00

PREREQUISITES	Descriptive statistics, inferencial statistics, matrix algebra
LEARNING OUTCOMES	1) KNOWLEDGE AND UNDERSTANDING: The course provides the student with the necessary knowledge to understand econometric tools and their applicability for the staudy of economic and financial phenomena. The student will be able to measure economic non observable variables and to verify the validity of economic theories, to forecast and to evaluate the effects of micro and macro economic policies. 2) APPLYING KNOWLEDGE AND UNDERSTANDING: through classes and labs, the student will be able to produce empirical analyses (forecasts and estimation) in order to give answer to important economic and financial questions. 3)MAKING JUDGEMENT: the student will be able to crtiucally assess, through the analysis of estimated models, the economic and financial implications of the obtained results. 4)LEARNING SKILLS: The course allows the student to understand econometrics basic concepts and gives all the instruments which are necessary for applied econometric research.
ASSESSMENT METHODS	The assessment method consists in the evaluation of a written exam on selected topics . If the student get PASS , he/she can concentrate on the remaining part of the program for the oral exam The written test (also the mid term test) aims at detecting the knowledg and the skills, of the student and his critic ability to bring them back into a written assessment using appropriate language of statisticas and economics . The test, lasting 3 hours, includes 2 question (the first is articulated in 4 sub-points and the second into 3) of practical and theoretical nature and of closed form. The student will have economic and financial data on the basis of which he will estimate economic relationships, test appropriate hypotheses, and, after diagnostick checking, he should be able to provide economic justifications. If the student passes the mid term test then he/she will be' assessed on the remaining part of the course during the final oral exam; otherwise he/she will be assessed on the entire programme. ORAL EXAM The oral exam, onmultiequational models, panel data models and discrete choice models, aims at gaining insights on the student knowledge of the topics FINAL ASSESSMENT METHOD The final score is given by the arithmetic average of the scores of the written and the oral exam. To get a pass for in the written exam, the student must show general knowledge and understanding of the topics (concepts and definitions) and must have developed basic skills for the identification of the correct econometric methodology relevant for the economic problem which is the object of study. The better is the performance of the student in the written exma an the expositive skills in the oral exam, thehigher will be the score.
EDUCATIONAL OBJECTIVES	The course aims at making possible for the student to understand and use the main econometric analysis methods. At the end of the course the student will be able , through simulated, economic and financial data, to: 1) specify models after considering the distinction between endogenous and exogenous variables; 2) test appropriate hypotheses suggested by the economic theory; 3)set and evaluate an empirical project.
TEACHING METHODS	Lectures, classes, labs.
SUGGESTED BIBLIOGRAPHY	Hill R.C., Griffitths W.E., Lim G. C. (2013) Principi di Econometria , Zanichelli. Marcellino M. (2006), Econometria applicata:un'introduzione, Egea. Dispense del corso (esercitazioni e materiale didattico integrativo) Cappuccio N., Orsi R. (2011),Introduzione all'econometria,Giappichelli Editore, Stock J.H, M.W. Watson (2012), Introduzione all'Econometria, Pearson, Prentice Hall. Pastorello S.,(2001) Rischio e Rendimento. Teoria finanziaria e applicazioni Econometriche, Il Mulino

SYLLABUS

Hrs	Frontal teaching
2	Review of Probability and Statistics
6	Linear regression model; OLS estimator; maximum likelihood estimation.
4	Restricted least suares, misspecification: omitted variables and inclusion of non relevant variables; multicollinearity

SYLLABUS

Hrs	Frontal teaching
8	GLS method; heteroscedasticity; autocorrelation.
4	Non-linearity; Non normality of errors; dummy variables
1	Parameters instability in linear regression models; structural breaks and tests for the presence
3	Dynamic models:specification,estimation, inference and diagnostic check. Lagged dependent variable models; Distributed lag models; autocorrelation and misspecification
2	Deterministic and stochastic trend; Estimation with non-stationary variables; cointegration
4	Single equation Dynamic models ; error correction model
2	Capital Asset Pricing Model
4	Multiple equation models:non stationarity
4	Panel data models:SUR model; Fixed effect model; Random effect model
4	Discrete choice models, Logit and Probit model: specification, estimation and diagnostic

Hrs	Workshops
12	Economic and financial applications of single equation models
12	Economic and financial application of dynamic single equation models