



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Scienze Economiche, Aziendali e Statistiche		
ACADEMIC YEAR	2018/2019		
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)	132		
COURSE ACTIVITY (Hrs)	68		
PROPAEDEUTICAL SUBJECTS	16074 - STATISTICS 2 02799 - POLITICAL ECONOMICS 2		
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	Students must be familiar with descriptive, inferential statistics and matrix algebra.
LEARNING OUTCOMES	1) Conoscenza e capacita' di comprensione: il corso fornisce allo studente le conoscenze necessarie per comprendere gli strumenti dell'econometria e la loro applicabilita' alla soluzione di problemi economici e finanziari di interesse. Lo studente sara' capace di misurare le variabili economiche non-osservabili (ad esempio la propensione marginale al consumo), di verificare la validita' delle teorie economiche (ad esempio la teoria del reddito permanente), di prevedere l'andamento futuro delle variabili economiche reali e finanziarie (ad esempio i consumi, l'inflazione e la volatilita' dei titoli azionari) e di valutare gli effetti delle politiche macro e micro-economiche (ad esempio l'effetto di una riduzione delle imposte sul deficit pubblico). 2) Capacita' di applicare conoscenza e comprensione: tramite le esercitazioni in aula e i laboratori, lo studente sara' in grado di condurre analisi empiriche (previsioni e stime) per rispondere a domande economiche e finanziarie di interesse. 3) Autonomia di giudizio: lo studente sara' capace di valutare criticamente, tramite l'analisi dei modelli stimati, le implicazioni di natura economica e finanziaria dei risultati empirici ottenuti. 4) Abilita' comunicative: lo studente apprendera' come presentare ed interpretare i risultati dell'analisi econometrica e di giustificarne, alla luce della teoria statistica ed economica, la validita' empirica. 5) Capacita' di apprendimento: il corso consente allo studente di comprendere i concetti di base dell'econometria e fornisce gli strumenti per la realizzazione di ricerche elementari nel campo dell'econometria applicata.
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 knowledge and the skills, of the student and his critic ability to bring them back into a written assessment using appropriate language of statistics and economics . The test, lasting two hours, includes 1 question (articulated in 4 sub-points) 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 diagnostic 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, on multiequational 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.
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., Griffiths 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 (2016), Introduzione all'Econometria, Pearson, Prentice Hall. Pastorello S.,(2001) Rischio e Rendimento. Teoria finanziaria e applicazioni Econometriche, Il Mulino PROGRAMMA

SYLLABUS

Hrs	Frontal teaching
2	Review of Probability and Statistics
5	Linear regression model; OLS estimator; maximum likelihood estimation
4	Restricted least squares, misspecification: omitted variables and inclusion of non relevant variables; multicollinearity
6	GLS method; heteroscedasticity; autocorrelation.
4	Review of Linear regression; Parameters instability; Tests for Structural breaks
5	Non-linearity; Non normality of errors; dummy variables; Parameters instability in linear regression models; structural breaks and tests for the presence
5	Dynamic Models: specification, estimation, inference and diagnostic check; Lagged dependent variable models; Distributed lag models, autocorrelation and misspecification.
4	Deterministic/Stochastic trend; Estimation with non-stationary variables; cointegration; Error Correction Model.
4	Hint on Multiequation models : non stationarity
5	Panel Data: SUR model, fixed effect model; random effect model
4	Models for Qualitative dependent variable: linear probability model; LOGIT and PROBIT models
Hrs	Workshops
12	Uniequational Static models in economics and finance
8	Uniequational Dynamic models in economics and finance