



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Scienze Economiche, Aziendali e Statistiche		
ACADEMIC YEAR	2017/2018		
BACHELOR'S DEGREE (BSC)	ECONOMICS AND FINANCE		
INTEGRATED COURSE	ECONOMETRICS - INTEGRATED COURSE		
CODE	18811		
MODULES	Yes		
NUMBER OF MODULES	2		
SCIENTIFIC SECTOR(S)	SECS-P/05		
HEAD PROFESSOR(S)	LO CASCIO IOLANDA	Professore Associato	Univ. di PALERMO
OTHER PROFESSOR(S)	LO CASCIO IOLANDA	Professore Associato	Univ. di PALERMO
	DE LUCA GIUSEPPE	Professore Associato	Univ. di PALERMO
CREDITS	6		
PROPAEDEUTICAL SUBJECTS	06649 - STATISTICS 2 02799 - POLITICAL ECONOMICS 2		
MUTUALIZATION			
YEAR	3		
TERM (SEMESTER)	2° semester		
ATTENDANCE	Not mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	DE LUCA GIUSEPPE Monday 10:00 12:00 Tuesday 12:00 14:00 Stanza 5.14 LO CASCIO IOLANDA Friday 10:00 12:00		

DOCENTE: Prof.ssa IOLANDA LO CASCIO

PREREQUISITES	Students must be familiar with descriptive, inferential statistics and matrix algebra.
LEARNING OUTCOMES	<p>1) KNOWLEDGE AND UNDERSTANDING: The course provides the student with the necessary knowledge to understand econometric tools and their applicability for the study 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.</p> <p>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.</p> <p>3) MAKING JUDGEMENT: the student will be able to critically assess, through the analysis of estimated models, the economic and financial implications of the obtained results.</p> <p>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.</p>
ASSESSMENT METHODS	<p>The student assessment is by an oral exam taking place after passing a written (mid-term) test on the first half of the course .If the student passes, he/she will focus only on the second part of the course for the oral exam. If he/she fails, he/she has to answer to all the topics of the programme.</p> <p>The written test (also the mid term test) aims at detecting the knowledge and the skills, of the student and his critical 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.</p> <p>ORAL EXAM</p> <p>The oral exam, on dynamic models, estimation with non-stationary variables, aims at gaining insights on the student knowledge of these topics</p> <p>FINAL ASSESSMENT METHOD</p> <p>The final score is given by the arithmetic average of the scores of the written and the oral exam.</p> <p>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 exam and the expositive skills in the oral exam, the higher will be the score.</p>
TEACHING METHODS	Lectures, classes, labs

**MODULE
MICRO-ECONOMETRICS**

Prof. GIUSEPPE DE LUCA

SUGGESTED BIBLIOGRAPHY

Il testo di riferimento è:

Stock J.H. e Watson M.W. (2012), *Introduzione all'Econometria* (terza edizione), Pearson Education Italia.

Altre dispense e articoli di letteratura verranno fornite durante il corso. Altri utili riferimenti bibliografici sono:

Peracchi F. (1995), *Econometria*, McGraw-Hill Italia.

Greene (2003), *Econometric Analysis*, Pearson Education.

Verbeek M. (2006), *Econometria*, Zanichelli.

Wooldridge J.M. (2009), *Introductory Econometrics. A Modern Approach* (4th Ed.), South-Western Cengage Learning.

AMBIT	10705-Attività formative affini o integrative
INDIVIDUAL STUDY (Hrs)	39
COURSE ACTIVITY (Hrs)	36

EDUCATIONAL OBJECTIVES OF THE MODULE

1. Owning a basic glossary of econometric and statistical terminology.

2. Know the key methods for inferential analysis of socio-economic phenomena, assumptions underlying the specification, estimation and validation of linear regression models and possible extensions, and theoretical properties of the underlying estimators.

3. Ability to process real data and carry out quantitative analyses of socio-economic phenomena with the aid of the Stata package. Ability to interpret and summarize the results.

4. Ability to use the analytical tools acquired during the course to formulate interpretative hypotheses, obtain strategic implications, and evaluate goodness and relevance of empirical analyses.

SYLLABUS

Hrs	Frontal teaching
1	Introduction
3	Review of a linear regression model with cross-sectional data and underlying assumptions.
2	Misspecification of the conditional mean
2	Engoneneity issues
4	Regression models for limited dependent variables
2	Static linear regression models for longitudinal data.

Hrs	Workshops
2	Stata: Introduction, importing and manipulating data
2	Stata: estimation and validation of linear regression models for cross-sectional data
2	Stata: ML estimation of GLM (probit and logit), Heckman two-step estimates of sample selection models, nonparametric estimation of binary choice models.
2	Stata: IV estimates for endogeneity issues and estimates of panel data models

**MODULE
MACRO-ECONOMETRICS**

Prof.ssa IOLANDA LO CASCIO

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 (2012), Introduzione all'Econometria, Pearson,
 Prentice Hall.

AMBIT	10705-Attività formative affini o integrative
INDIVIDUAL STUDY (Hrs)	39
COURSE ACTIVITY (Hrs)	36

EDUCATIONAL OBJECTIVES OF THE MODULE

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.

SYLLABUS

Hrs	Frontal teaching
2	Review of probability and statistics
6	Linear regression model; OLS estimator; maximum likelihood estimation.
4	Restricted least squares, misspecification: omitted variables and inclusion of non relevant variables; multicollinearity
8	GLS method; heteroscedasticity; autocorrelation.
4	Non-linearity; Non normality of errors; dummy variables; Parameters instability in linear regression models; structural breaks and tests for their presence
Hrs	Workshops
12	Economic and financial applications of single equation models 12 Economic and financial application of dynamic single equation models