UNIVERSITY OF PIRAEUS

1) GENERAL

SCHOOL	ECONOMICS, BUSINESS AND INTERNATIONAL STUDIES		
ACADEMIC UNIT	ECONOMICS		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	**OKOIM01**	**SEMESTER**	5
COURSE TITLE	**ECONOMETRICS I**		
INTEPENDENT TEACHING ACTIVITIES	**WEEKLY TEACHING HOURS**	**CREDITS**	
Lectures	4	6	
COURSE TYPE	General knowledge		
PREREQUISITE COURSES	-		
LANGUAGE OF INSTRUCTION and EXAMINATIONS	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE WEBSITE (URL)	https://eclass.unipi.gr/courses/OEP335/		

2) LEARNING OUTCOMES

Learning Outcomes

The current course provides a thorough presentation of the basic quantitative technique used in Economics to empirically identify the behavior of many phenomena. The course discusses the concept of a random variable, presents the distributions of continues random variables and reviews the basic statistical analysis of one variable. Next, it covers the correlation analysis, properties of the correlation coefficient and hypothesis testing. The simple regression model with all its characteristics, i.e., estimation, goodness of fit, distributions and properties of the estimators, Gauss-Markov theorem, hypothesis testing and forecasting is presented afterwards.

The course presents next the multiple regression model with all its characteristics, i.e., estimation, coefficients of determination and adjusted coefficient of determination, properties of estimators and distribution, all the tests, ANOVA analysis and forecasting.

The tools students will learn in this course will allow them to analyze real data and derive policy conclusions for Economics and Business issues.

General Competences

- Data analysis
- Estimating relations for identifying the behavior of a phenomenon and for forecasting
- Quantitative analysis
- Correlation and Regression Analysis
- Decision Making process
- Project planning and management

3) SYLLABUS

- Basic concepts of deterministic versus stochastic models
- Random variables and distributions of continues random variables
- Statistical inference
- Correlation Analysis
- Simple regression model – Estimation – Testing and Forecasting
- Multiple regression model - Estimation – Testing and Forecasting

4) TEACHING and LEARNING METHODS		
DELIVERY	In class lectures	
USE OF INFORMATION AND COMMUNICATION TECHNOLOGY	Use of ICT in lectures	
TEACHING METHODS	**Activity**	**Semester workload**
	Lectures	52
	Study	64
	Exercises	32
	Exam	2
	Course Total	150
STUDENT PERFORMANCE EVALUATION	The evaluation of the course is implemented through a final examination.	

ATTACHED BIBLIOGRAPHY	• Suggested Bibliography:
	  ○ Agiakloglou, C. and Benos, T. “Principles of Econometric Analysis”
	• - Related Journals: :
	  ○ Journal of Econometrics
	  ○ Journal of Applied Econometrics
	  ○ Journal of Quantitative Economics
	  ○ Journal of Applied Economics	