



UNIVERSITY OF PIRAEUS

1) GENERAL

SCHOOL	ECONOMICS, BUSINESS AND INTERNATIONAL STUDIES		
ACADEMIC UNIT	ECONOMICS		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	OKMAK03	SEMESTER	8
COURSE TITLE	SPECIAL TOPICS IN MACROECONOMICS		
INDEPENDENT TEACHING ACTIVITIES	WEEKLY TEACHING HOURS	CREDITS	
Lectures	4	5	
COURSE TYPE	ELECTIVE		
PREREQUISITE COURSES	-		
LANGUAGE OF INSTRUCTION and EXAMINATIONS	ENGLISH		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE WEBSITE (URL)	https://eclass.unipi.gr/courses/OEP258/		

2) LEARNING OUTCOMES

Learning Outcomes

This advanced elective course builds upon Macroeconomic Theory I and II, forming the core of the macroeconomic trilogy in the Department of Economics. Designed for a transition between undergraduate and postgraduate levels, it emphasizes the empirical application of economic theories using econometric software (STATA). Students present their econometric and economic analyses via PowerPoint at the end of the semester.

By the end of the course, students will be able to:

- Search for and analyze data.
- Estimate economic models and propose appropriate policies.
- Engage with high-level scientific research, emphasizing research ethics, presentation, and dissemination of results.
- Apply techniques to solve practical research problems.
- Develop critical data analysis skills and the ability to evaluate and interpret results, promoting evidence-based decision-making.
- Communicate effectively within the academic community and to the general public.

This course is essential for students pursuing a research career at higher academic levels or in the job market.

General Competences

- Data search, analysis, and synthesis using appropriate technologies.
- Critical thinking.
- Teamwork.
- Creative and inductive reasoning.
- Multidisciplinary work environment adaptability.
- Numerical data handling, pattern recognition, and deriving actionable insights.
- Familiarity with data types, variables, and observation organization for effective analysis.
- Evaluation of econometric results, assessing validity, and making evidence-based decisions.
- Enhancing real-world problem-solving through econometric methods.
- Data presentation through charts and diagrams with interpretation for conclusions.

3) SYLLABUS

The course covers the following topics in depth:

Introduction to STATA

- Opening and saving STATA data files (.dta).
- Generating/renaming variables and creating dummy variables.
- Data management: merging and appending files.
- Summary statistics.
- Graphical analysis (scatter diagrams, histograms).
- Importing data into STATA.
- Saving output in a log file.

Econometric Techniques

- OLS and GLS regression.
- Saving residuals and fitted values.
- Testing linear restrictions.
- Diagnostic tests for heteroskedasticity and autocorrelation.
- Robust standard error estimation.
- FGLS estimation.

4) TEACHING and LEARNING METHODS

DELIVERY	In-class lecturing and lab sessions	
USE OF INFORMATION AND COMMUNICATION TECHNOLOGY	<ul style="list-style-type: none"> • Use of ICT in lectures , lab sessions and in Communication with students 	
TEACHING METHODS	Activity	Semester workload
	Lectures	40
	Laboratory Exercises	12
	Weekly Study and literature review	71
	Final Exam	2
	TOTAL	125
STUDENT PERFORMANCE EVALUATION	Assessment is based entirely on group projects (100%), which involve applying the theoretical and econometric methods learned in the course to real-world data, culminating in a written report and public presentation.	
ATTACHED BIBLIOGRAPHY	<p>Suggested Bibliography</p> <p>Articles:</p> <ul style="list-style-type: none"> • Checherita-Westphal, C., Rother, P. (2012). "The impact of high government debt on economic growth and its channels: An empirical investigation for the euro area." <i>European Economic Review</i>, 56(7), 1392-1405. <p>Books:</p> <ul style="list-style-type: none"> • Cameron, C., & Trivedi, P. (2010). <i>Microeconometrics Using Stata</i>. Stata Press. • Wooldridge, J. M. (2012). <i>Econometric Analysis of Cross Section and Panel Data</i>. MIT Press. <p>Data Sources:</p> <ul style="list-style-type: none"> • World Bank Development Indicators: https://databank.worldbank.org/data/source/world-development-indicators • Federal Reserve Bank of Saint Louis Database (FRED): https://fred.stlouisfed.org/ • International Monetary Fund (IMF) database: http://data.imf.org/ 	