APPLIED ECONOMETRICS II

COURSE OUTLINE

Responsible: Maria Grydaki

1. GENERAL			
SCHOOL	School of Management and Economics		
ACADEMIC UNIT	Department of Accounting and Finance		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	0803.4.006.0	**SEMESTER**	2nd
COURSE TITLE	Applied Econometrics II		

INDEPENDENT TEACHING ACTIVITIES if credits are awarded for separate components of the course	**WEEKLY TEACHING HOURS**	**CREDITS**
	3	5
Total	**3**	**5**

COURSE TYPE general background, special background, specialised general knowledge, skills development	Mandatory, General Background
PREREQUISITE COURSES	None
LANGUAGE OF INSTRUCTION and EXAMINATIONS	English
OFFERED TO ERASMUS STUDENTS	Yes (in English) — Spring Semester
COURSE WEBSITE (URL)	https://eclass.hmu.gr/courses/ACCFIN149/

2. LEARNING OUTCOMES

Learning outcomes

On completion of this module, students should be able to:

MLO1

Critically investigate the basic assumptions of simple and multiple regression models and explore potential violations and their consequences for misinterpretation.

MLO2

Conduct multiple linear regressions using EVIEWS software using cross sectional and time series data and synthesise the results with economic theory.

MLO3

Use appropriate econometric methods to determine whether important relationships are independent of time, and hence be able to critically evaluate the data generation process.

Upon completion of this course, students should be able to conduct basic econometric analyses.

General Competences

- Decision-making
- Researching, analyzing, and synthesizing data and information, using the necessary technologies
- Working independently
- Adapting to new situations
- Teamwork
- Working in an international environment
- Promoting free, creative, and inductive thinking
- Generating new research ideas.

3. SYLLABUS

Indicatively, but not limited to, the course presentation includes the following sections:

1. The Problem of Model Specification Error – Nonlinear Models and Variable Transformations
2. Multiple Regression Analysis with Categorical Data: Binary or Categorical Variables (or Dummy Variables)
3. Heteroscedasticity
4. Variance Modeling (ARCH-GARCH)
5. Basic Regression Analysis with Time Series Data
6. Autocorrelation - - Random Walk - ARMA(p,q) Autoregressive Models
7. Further Issues (Stationarity) in Time Series Analysis Using Least Squares

4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY Face-to-face, Distance learning, etc.	Face to face
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, laboratory education, communication with students	• Use of ICT in teaching (PowerPoint presentations). • Uploading slides and course materials to the e-class platform. • Communicating with students via the e-class platform and email. • Using a projector • Using econometric software
TEACHING METHODS The manner and methods of teaching are described in detail.	

Activity	**Semester workload**
Lectures	33
Practical sessions	24
Laboratory application using econometric software	6
Personal Study	62
Course total	**125**

STUDENT PERFORMANCE EVALUATION Description of the evaluation procedure	• Assessment language: English. • Midterm written exam (30% or 40% of the total grade) • Students will be assessed through a final written exam, which may include: 1. Short-answer questions. 2. Problem-solving questions. • Students will have access to their assessment results to review explanations regarding their errors. • A special exam is provided for students with disabilities.

5. ATTACHED BIBLIOGRAPHY

The core text book for this module is:

Gujarati D. (2009), Basic Econometrics, 5th edition, McGraw-Hill Irwin (ISBN: 9780071276252).

Additional readings:

Hill, R. Carter, William E. Griffiths and Guay C. Lim (2018), Principles of Econometrics, 5th edition, John Wiley & Sons Pte Ltd.

Wooldridge, M. J. (2013), Introductory Econometrics: A Modern Approach, 5th edition, South-Western, Cengage Learning