APPLIED ECONOMETRICS I

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	0803.3.005.0	**SEMESTER**	1st
COURSE TITLE	Applied Econometrics I		

INDEPENDENT TEACHING ACTIVITIES if credits are awarded for separate components of the course	**WEEKLY TEACHING HOURS**	**CREDITS**
	3	6
Total	**3**	**6**

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) — Winter Semester
COURSE WEBSITE (URL)	https://eclass.hmu.gr/courses/ACCFIN181

2. LEARNING OUTCOMES

Learning outcomes

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

- Apply concepts of mathematics, statistics, and probability to describe economic data and draw statistical conclusions.
- Critically examine the basic assumptions of simple regression models and investigate possible violations and their consequences for misinterpretation.
- Interpret results of simple and multiple linear regressions produced with EVIEWS software using cross-sectional data and time series.

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

Applied Econometrics I is based on the following content and lecture programme:

1. Review of introductory mathematical foundations and statistics (calculus, probability and descriptive statistics)

2. Overview of statistical inference (sampling and sampling distributions, central limit theorem, confidence intervals, hypothesis testing)

3. Simple Regression Analysis – Estimation, Ordinary Least Squares Method, Inference

4. Multiple Regression Analysis – Estimation, Inference

5. Multicollinearity

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: 87 **Course total: 150**
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:

Asteriou D. and S. G. Hall (2021), Applied Econometrics, 4th edition, Macmillan International Higher Education, Red Globe Press (ISBN 978-1-352-01202-6).

Additional readings:

Brooks, C. (2019), Introductory Econometrics for Finance, 4th edition, Cambridge University Press.

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

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