

Course title: Econometrics

Instructor: Dritsaki Chaido, Professor

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Semester: Spring

ECTS: 6

Workload during semester: 150 hours

Course overview

Econometrics is based on the science of Economics, Statistics, and Mathematics. Its scope is the measurement and empirical testing of economic relations. The course aims to familiarize the students in using econometric techniques to estimate economic models using a computer and special for this purpose software packages (E-Views).

Course outline per week

1st week: Introduction to Econometrics

2nd week: Single-Equation Regression Models-Basic concepts, model estimation, Ordinary Least Squares Method (OLS), Coefficient of Determination, Correlation coefficient

3rd week: Interval estimation and hypothesis testing.

4th week: Extensions of the two-variable linear regression model

5th week: Multiple Regression Analysis, hypothesis testing

6th week: Multicollinearity

7th week: Diagnostic tests- Normality test

8th week: Diagnostic tests- Autocorrelation tests

9th week: Diagnostic tests- Heteroscedasticity tests

10th week: Diagnostic tests – Stability tests

11th week: Exercises using EViews

12th week: Exercises using EViews

13th week: Revision

Capabilities developed in the course

Capability 1: Disciplinary Knowledge and Practice

Capability 2: Critical Thinking

Capability 3: Solution Seeking

Capability 4: Communication and Engagement

Capability 5: Independence and Integrity

Learning outcomes

On successful completion of this course students will be able to:

- Design and estimate a model of linear regression.
- Use an econometric software package (e.g. E-views) in the implementation of econometric techniques.
- Critically evaluate and assess econometric models and their results.
- Critically evaluate and assess the results of diagnostic tests.

Assessment methods

Assignments 50%

Exams 50%

NOTE: A student's assessed work may be reviewed for potential plagiarism or other forms of academic misconduct.

Delivery mode

Lectures

NOTE: The recording of any class on a personal device requires the permission of the instructor

Learning resources

Course material, ppt presentations, EViews software /Digital platforms: Eclass (eclass.gunet.gr) / Moodle

Reading list

1. Gujarati D., (2003), Basic Econometrics. Economic series. McGraw-Hill international editions: Economic series . McGraw Hill . 4th Edition
2. Wooldridge J., (2019) Introductory Econometrics: A Modern Approach. South-Western College Publishing; 7th Edition

3. Stock J, Watson MW. (2003) Introduction to Econometrics. New York: Prentice Hall