

## COURSE LAYOUT

### 1. GENERAL

<b>SCHOOL</b>	APPLIED ECONOMICS AND SOCIAL SCIENCES		
<b>DEPARTMENT</b>	AGRICULTURAL ECONOMICS & RURAL DEVELOPMENT		
<b>STUDY LEVEL</b>	Undergraduate		
<b>COURSE CODE</b>	139	<b>SEMESTER</b>	7 <sup>th</sup>
<b>COURSE TITLE</b>	ECONOMETRICS		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>WEEKLY TEACHING HOURS</b>	<b>ECTS</b>
Lectures		5	5
<b>COURSE TYPE</b>	Scientific area		
<b>PREREQUISITES</b>			
<b>LANGUAGE</b>	Greek		
<b>IS THE COURSE OFFERED for ERASMUS STUDENTS?</b>	No		
<b>COURSE WEB PAGE</b>	<a href="https://oeclass.aua.gr/eclass/courses/AOA244/">https://oeclass.aua.gr/eclass/courses/AOA244/</a>		

### 2. LEARNING OUTCOMES

<b>Learning Outcomes</b>
<p>This course introduces students to the concept of data analysis using econometric tools in order to answer relevant economic problems using primary and secondary data.</p> <p>By successfully completing this course the student will:</p> <ul style="list-style-type: none"> <li>• Will have a good knowledge and understanding of the basic theory around simple and multiple regression and will be able to estimate a regression using basic computer software</li> <li>• Will understand the consequences of violations of basic assumptions and the alternative ways available for estimation.</li> <li>• Will understand the role and usefulness of qualitative variables and how these can be used in an econometric model.</li> <li>• Will be able to interpret results and evaluate economic significance, examine the effect of economic policies and/or make predictions.</li> <li>• will have the ability to analyze and interpret patterns of data by using econometric tools that can be used in making judgements about related socio-economic problems.</li> </ul>
<b>General competences</b>
<ul style="list-style-type: none"> <li>• Search, analyze and synthesize data and information by using appropriate software</li> <li>• Autonomous work</li> <li>• Decision making</li> <li>• Advance of free thinking and reasoning</li> </ul>

### 3. COURSE CONTENT

<ul style="list-style-type: none"> <li>• Simple regression</li> <li>• Multiple regression</li> <li>• Specification errors</li> <li>• Non-linear specifications</li> <li>• Multicollinearity</li> <li>• Heteroskedasticity</li> <li>• Autocorrelation</li> </ul>
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- Dummy variables

#### 4. TEACHING and LEARNING METHODS - Evaluation

<b>TEACHING METHOD</b>	In class	
<b>USE OF INFORMATICS and COMMUNICATION TECHNOLOGIES</b>	<ul style="list-style-type: none"> <li>• e-class platform</li> <li>• Power-Point slides</li> <li>• Communication with students using eclass and email</li> </ul>	
<b>TEACHING ORGANISATION</b>	<i>Activity</i>	<i>Work Load</i>
	Lectures	60
	Study at home	65
	<b>Course total (25 hours of student work load per ECTS)</b>	<b>125</b>
<b>STUDENTS EVALUATION</b>	Written final exams (100%) including: <ul style="list-style-type: none"> <li>▪ Multiple choice questions</li> <li>▪ Solving exercises</li> <li>▪ Comprehensive understanding questions</li> </ul>	

#### 5. BIBLIOGRAPHY

Suggested:

- Gujarati, D.N. and Porter, D. (2012) Basic Econometrics. 5<sup>th</sup> edition, Publisher: Tziola.
- Studenmund A. (2016) Using Econometrics: A Practical Guide. 1st edition, BROKEN HILL PUBLISHERS LTD.

Scientific journals:

- Journal of Econometrics
- Econometric Reviews
- Econometrics Journal
- Econometrica
- Econometric Theory