

## COURSE OUTLINE

### 1. GENERAL

<b>SCHOOL</b>	NATURAL SCIENCES		
<b>DEPARTMENT</b>	MATHEMATICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	MAT_OR464	<b>SEMESTER OF STUDIES</b>	7 <sup>th</sup>
<b>COURSE TITLE</b>	PRINCIPLES OF ECONOMICS FOR ENGINEERS & SCIENTISTS		
<b>INDEPENDENT TEACHING ACTIVITIES</b> <i>if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits</i>	<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>	
Lectures and Tutorials	4	6	
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
<b>COURSE TYPE</b> <i>general background, special background, specialised general knowledge, skills development</i>	Elective course		
<b>PREREQUISITE COURSES:</b>			
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>	Greek		
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>	No		
<b>COURSE WEBPAGE (URL)</b>	<a href="https://eclass.upatras.gr/courses/ECON1238/">https://eclass.upatras.gr/courses/ECON1238/</a>		

### 2. LEARNING OUTCOMES

#### Learning outcomes

*The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.*

*Consult Appendix A*

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing Learning Outcomes*

Upon successful completion of the course, students will be able to:

- Understand key economic notions
- Describe basic microeconomic behavior of consumers and firms
- Identify and describe fundamental macroeconomic measures
- Recognize the influence of basic macroeconomic developments of business aspects
- Understand the role and the process of technological innovation
- Grasp and define entrepreneurship types
- Understand and use basic tools of investment projects evaluation

### General Abilities

*Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?*

*Search for, analysis and synthesis of data and information, with the use of the necessary technology*

*Adapting to new situations*

*Decision-making*

*Working independently*

*Team work*

*Working in an international environment*

*Working in an interdisciplinary environment*

*Production of new research ideas*

*Project planning and management*

*Respect for difference and multiculturalism*

*Respect for the natural environment*

*Showing social, professional and ethical responsibility and sensitivity to gender issues*

*Criticism and self-criticism*

*Production of free, creative and inductive thinking*

*Others...*

- Ability to grasp the effects of economic and financial developments on technical and engineering issues
- Ability to interact with others in problem solving related to business issues
- Study skills needed for continuing professional development.

Furthermore, by the end of the course students will have developed the following general abilities (from the list above):

- Seeking and analysis of information along with the use of the appropriate methodological approaches
- Decision making

Working in interdisciplinary context

### 3. COURSE CONTENT

The course is a general introduction in micro and macroeconomics. In addition, some basic elements of the economics of innovation and investments analysis are included. The following sections compose the body of the course:

- The fundamental economic problem
- Consumer's Behavior
- Firms' production and costs
- Demand and Supply
- Elasticities, endogenous and exogenous shocks
- Competition and Business Strategies
- Key Macroeconomic measures
- The role of state intervention and the open economies
- Aspects of innovation and entrepreneurship

Basic elements of investment projects evaluation

#### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b> <i>Face-to-face, Distance learning, etc</i>	Lectures (face to face)		
<b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES</b> <i>Use of ICT in teaching, laboratory education, communication with students</i>	ICT in teaching and communication with students (e-class)		
<b>TEACHING ORGANIZATION</b> <i>The manner and methods of teaching are described in detail.</i>  <i>Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.</i>  <i>The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</i>	<b>Activity</b>	<b>Semester workload</b>	
	Lectures	26	
	Tutorials	26	
	Hours of personal study by the student	94	
	Intermediate examination	2	
	Final examination	2	
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150</b>	
	<b>STUDENT ASSESSEMENT</b> <i>Description of the evaluation procedure</i>  <i>Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other</i>  <i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i>	<b>Assessment Language:</b> Greek <b>Assessment Language for Erasmus students:</b>  <b>Assessment methods:</b> Written examination based which includes: <ul style="list-style-type: none"> <li>- Questions of multiple choice type</li> <li>- Questions of short answer type</li> </ul> Minimum passing grade: 5 Maximum passing grade: 10	

#### 5. RECOMMENDED LITERATURE

Begg, D. (2006). Introduction to Economics. (Greek language translation: Εισαγωγή στην Οικονομική. Εκδόσεις: Κριτική)

Mankiw, N. G. (2001). Principles of Economics (Greek language translation: Αρχές της Οικονομικής. Εκδόσεις: Τυπωθήτω).

Additional reading material is accessible at (e-class): <https://eclass.upatras.gr/courses/ECON1238/>