



# DEPARTMENT OF ECONOMICS

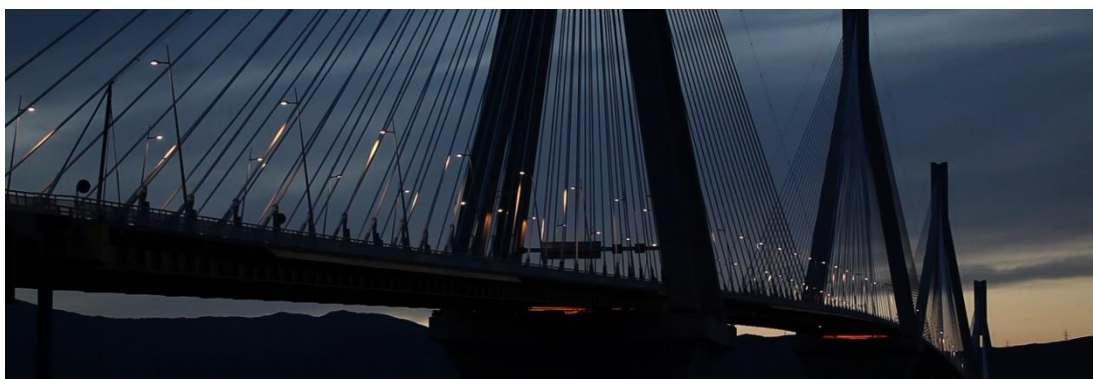
UNIVERSITY OF PATRAS



Academic  
year  
2020-2021

## UNDERGRADUATE PROGRAM





# Preface

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Welcome to the Department of Economics of the University of Patras.

This guide provides information about the University of Patras and the Department of Economics, and also describes the undergraduate curriculum for 2020-2021. The guide is addressed to all students wishing to be informed about our Bachelor's Degree Program, including students from other European universities with which the Department of Economics collaborates under the LLP ERASMUS+ Program.

Further information about the University of Patras and the Department of Economics is available at [www.upatras.gr](http://www.upatras.gr) and [www.econ.upatras.gr](http://www.econ.upatras.gr), [www.econ.upatras.gr/en/erasmus](http://www.econ.upatras.gr/en/erasmus) respectively.

Dimitrios Tzelepis, Associate Professor  
Head of Department of Economics

October 2020



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# The University of Patras

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## GENERAL INFORMATION

The University of Patras was founded in 1964 as a self-governing institution under the supervision of the Ministry of Education. It started to function in the academic year 1966-67. Today, it is the third largest university in Greece. It enjoys recognition as an academic institution with a worldwide impact, attracting thousands of students and a large number of academics who are actively involved in the cutting edge of science, innovation and excellence.

The University is organised into seven Schools, containing Departments of related academic fields:

- The *School of Agricultural Sciences* consists of the Department of Animal Production, Fisheries & Aquaculture (based in Messolonghi), the Department of Biosystems & Agricultural Engineering (based in Messolonghi), the Department of Crop Science (based in Messolonghi), the Department of Food Science & Technology (based in Agrinio), the Department of Agricultural Biotechnology (based in Agrinio), and the Department of Agriculture (based in Amaliada)
- The *School of Economics & Business* consists of Department of Business Administration (based in Patras), the Department of Business Administration of Food & Agricultural Enterprises (based in Agrinio), the Department of Economics (based in Patras), the Department of Management Science & Technology (based in Patras), and the Department of Tourism Management (based in Patras)
- The *School of Engineering* consists of the Department of Architecture (based in Patra), the Department of Chemical Engineering (based in Patras), the Department of Civil Engineering (based in Patras), the Department of Computer Engineering & Informatics (based in Patras), the Department of Electrical & Computer Engineering (based in Patras), the Department of Environmental Engineering (based in Agrinio), and the Department of Mechanical Engineering & Aeronautics (based in Patras)
- The *School of Health Rehabilitation Sciences* consists of the Department of Nursing, (based in Patras), the Department of Physiotherapy (based in Aigio), and the Department of Speech & Language Therapy (based in Patras)

- The *School of Health Sciences* consists of the Faculty of Medicine (based in Patras), and the Department of Pharmacy (based in Patras)
- The *School of Humanities & Social Sciences* consists of the Department of Educational Science & Early Childhood Education (based in Patras), the Department of Education & Social Work (based in Patras), the Department of History & Archaeology (based in Agrinio), the Department of Museum Studies (based in Pyrgos), the Department of Philology (based in Patras), the Department of Philosophy (based in Patras), and the Department Theatre Studies (based in Patras).
- The *School of Natural Sciences* consists of the Department of Biology, the Department of Chemistry, the Department of Geology, the Department of Material Science, the Department of Mathematics and the Department of Physics, all based in Patras.

The University of Patras has acquired international prominence for pioneering wide-ranging research in several areas, such as Health, Biotechnology, Mechanics, Electronics, Informatics, Environment, Basic Science, and Social Sciences. A number of its Departments have been designated as Centres of Excellence, on the basis of international assessment. The University publishes a monthly newsletter, which provides information about the major research activities of its academic staff as well other academic events.



The main campus is situated in Rio, just 10 km outside the city of Patras and about 200 km west of Athens. The University has a large number of separate buildings, along with a Central Library, a Museum of Science & Technology, a Botanical Garden, and a Student Centre. On the main campus, one can also find the Students' Residence Hall, a Conference & Cultural Centre, a Restaurant, a Bank, a Bookstore, cafeterias & kiosks, and the University Hospital which functions both as the major regional medical centre and as a teaching facility for the Faculty of Medicine. Several other facilities are available on campus, including a gymnasium, a post-office, a swimming pool, a nursery school, and a primary & secondary school for the children of the academic & administrative personnel.

Together with the University's educational and research work, the rich campus life attracts many students every year as their first choice for their Degree studies. Currently, the University of Patras has a total of 30,185 undergraduate and 3,755 postgraduate students, 180 Laboratories, 17 Clinics, 693 Faculty Members, 232 Scientific Staff Members, and 438 Administration Staff Members.

Since its early days, the major aim of the University of Patras has been the effective interaction with the European and international environment. International policy is achieved through cooperation with universities and research institutions worldwide. Cooperation includes activities related to research and teaching, bilateral student/staff exchange agreements, and participation in international organizations, networks and associations. The University actively participates in the ERASMUS+ Programs (LLP Erasmus Studies and LLP Erasmus Placement).

Patras, capital of the prefecture of Achaia, is known for its past and present. The region's history stretches back to long before the time of the Trojan wars, and the town is named, according to tradition, after Patreas, one of the leaders of the Achaeans. The patron saint of Patras, to whom the University is dedicated, is St. Andrew, the first chosen of the Apostles, who martyred here. Between the lofty Mt. Panachaiko and the waters of the Mediterranean, the city of Patras lies under its 15th century Venetian castle. With a population of 200,000 inhabitants, Patras is also a major commercial and industrial centre, "the gateway to the west" for Greece, and a significant entry point for tourists. The city's recently founded "Science Park" provides a very good infrastructure for further future industrial & commercial development.

The city of Patras offers a wide variety of cultural opportunities. Many musical & theatrical events and festivals are taking place throughout the year, culminating in the International Summer Festival, which plays an important role in the city's cultural life. The city is also famous for its annual carnival, one of the best known in Europe, which occurs in the pre-Lent period in February or March.



Along Patras' attractive coastline, there are many picturesque seaside villages, which one can visit on a day trip. There are also several near-by islands to visit, such as Zakynthos, Kefalonia and Ithaka.



## UNIVERSITY ACADEMIC CALENDAR 2020-2021

The academic calendar for 2020-2021 is as follows:

FALL SEMESTER	SPRING SEMESTER
Teaching Period: 5/10/2020 - 15/1/2021	Teaching Period: 22/2/2021 - 4/6/2021
Examination Period: 25/1/2021 - 12/2/2021	Examination Period: 14/6/2021 - 2/7/2021





# Department of Economics

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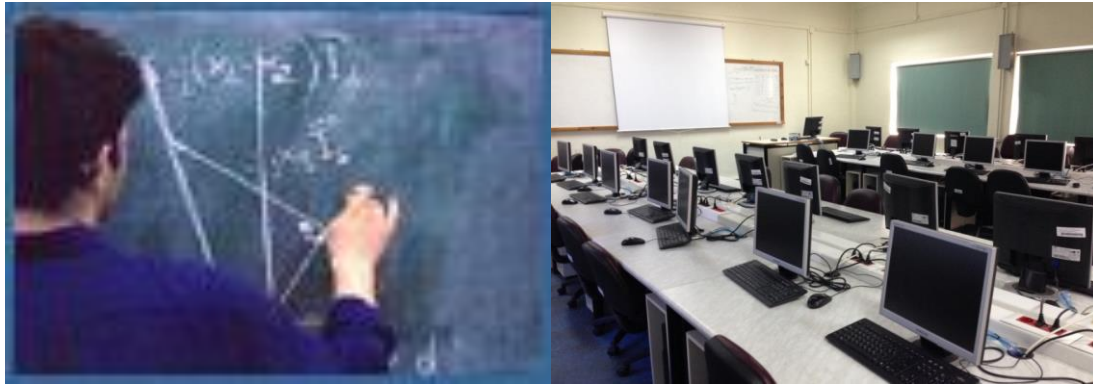
## GENERAL INFORMATION

The Department of Economics of the University of Patras was established by the Presidential Decree 325/23-5-1985, which designated Agrinio (Prefecture of Etoloakarnania) as its location. In 1997-1998, the Department of Economics was transferred to the main campus in Rio by the Presidential Decree 85/21-4-1998.

The Department of Economics belongs to the School of Economics & Business of the University of Patras. From October 2013 until May 2019, the School, in addition to the Department of Economics, included the Department of Business Administration (founded in 1999, based in Patras), the Department of Cultural Heritage Management & New Technologies (established in 2004, based in Agrinio), and the Department of Business Administration of Food & Agricultural Enterprises (founded in 2006, based in Agrinio). Since June 2019, the School of Economics & Business consists of 5 Departments: the Department of Economics, the Department of Business Administration, the Department of Business Administration of Food & Agricultural Enterprises, the Department of Tourism Management (founded in 2019, based in Patras), and the Department of Management Science and Technology (founded in 2019, based in Patras).

Dean of the School for the academic year 2020-2021 is Professor Voutsinas Vassilios, of the Department of Business Administration. Head of the Department of Economics for the academic year 2020-2021 is the Associate Professor Tzelepis Dimitrios.

The Department of Economics currently has a total of 2,000 students. It teaches a full range of economics subjects at the undergraduate level, and runs a full-time one-year Master's programme leading to an *MSc in Applied Economics and Data Analysis*. The Department also has a *Doctoral Programme in Economics*, with a maximum intake of about 20 students per year.



The Department of Economics is located North-West of the university's Administration Building (area of *Old Air-force Unit*) and consists of a number of separate small buildings, which include three big and two smaller lecture rooms for undergraduate and postgraduate teaching, two computer laboratories, equipped with all the latest statistical packages and other software, and a Departmental Library (situated next to the Departmental Office).

The Department subscribes to all the leading economics journals and to several specialists journals related to the research activities of faculty members. Students and staff members have access to this material through the University's Central Library, which, in addition to a large collection of books covering all the subjects taught in the different Departments, also has a European Documentation Centre.



## TEACHING & RESEARCH STAFF

### Full-time Academic & Research Staff

#### Professors

- Daouli, Joan (Ph.D. 1981, North Carolina State University, USA)  
(on study-leave in 2020-2021)  
*Research Field: Labour Economics, Microeconomics*
- Demoussis, Michael (Ph.D. 1981, North Carolina State University, USA)  
*Research Field: Microeconomics, Labour Economics, Applied Econometrics*  
(on study-leave in 2020-2021)
- Dimara, Efthalia (Ph.D. 1988, Université Pierre & Marie Curie, Paris VI, France)  
*Research Field: Applied Statistics, Data Analysis*
- Patronis, Vasilios (Ph.D. 1992, Université Paris I - Sorbonne, France)  
*Research Field: Economic History, History of Economic Thought*
- Skuras, Dimitrios (Ph.D. 1990, University of Aberdeen, UK)  
*Research Field: Regional Economics, Economics of Natural Resources*
- Tsekouras, Konstantinos (Ph.D. 1995, University of Patras, Greece)  
*Research Field: Economics of Industrial Organisation, Economics of Innovation, Productivity & Efficiency Analysis*

#### Associate Professors

- Giannakopoulos, Nikolaos (Ph.D. 2006, University of Patras, Greece)  
*Research Field: Applied Microeconomics, Labour Economics*
- Kounetas, Konstantinos, (Ph.D. 2007, University of Patras, Greece)  
*Research Field: Energy Economics, Applied Industrial Organization with a focus on estimation of efficiency & productivity*
- Tzelepis, Dimitrios (Ph.D. 2002, University of Patras, Greece)  
*Research Field: Earnings Management, Accounting, Fraud Detection*
- Venetis, Ioannis (Ph.D. 2000, University of Essex, UK)  
*Research Field: Theoretical & Applied Econometrics with emphasis on time-series analysis (non-stationarity, non-linear models)*
- Zervoyianni, Athina (Ph.D. 1989, University of Warwick, UK)  
*Research Field: Macroeconomics, European Union Economics, Economic Growth*

#### Assistant Professors

- Filis, George (Ph.D. 2004, Bournemouth University, UK)  
*Research Field: International Economics, Financial Economics, Energy Economics, Tourism Economic*
- Goulas, Eleftherios, (Ph.D. 2008, University of Patras, Greece)  
*Research Field: Macroeconomics, Economic Development, Financial Economics*
- Polymenis, Athanasse (Ph.D. 1997, University of Glasgow, UK)  
*Research Field: Statistics, Mathematics*
- Tagalakakis Athanasios, (Ph.D. 2005, European University Institute Florence)  
*Research Field: Macroeconomics, Fiscal & Monetary Policy, Labour Economics, Banking & Finance*
- Tzagarakis, Emmanuel (Ph.D. 2003, University of Patras, Greece)  
*Research Field: Information & Knowledge Management*

## Other Academic/Teaching Staff

### *Emeritus Professor*

- Sypsas, Panagiotis (Ph.D. 1983, University of Lancaster, UK),  
*Specialization: Operational Research, Applied Statistics.*

### *Special Teaching Staff*

- Daskalou, Victoria (Ph.D. 1998, Athens University of Economics & Business, Greece)  
*Specialization: Information Technology*
- Groumpou, Alexandra, Foreign-Language Unit, Patras University  
*Specialization: Business English*

Detailed information about the Department's research activities and output can be found in the *Annual Internal Evaluation Reports* and the *External Evaluation Reports* ([www.modip.upatras.gr](http://www.modip.upatras.gr))



## PROGRAM OF STUDIES



### A. Learning Outcomes

The Department of Economics provides a four-year single-subject Bachelor's Degree Program, firmly grounded in economic theory (micro and macro), quantitative methods (maths, statistics, and econometrics), and applied-economics subjects.

Its curriculum aims at acquiring knowledge and skills that enable graduates:

- to evaluate decisions by households, businesses, economic policy makers and other groups, and to understand the international economic environment and the forces that shape its behaviour
- to use the analytical tools of economic science (in its theoretical and applied dimension) in order to study current economic issues and assess alternative policies
- to pursue successful careers in the private and/or public sector as well as in international organizations, and to undertake high-quality postgraduate studies.

Parallel but equally important objectives of the curriculum are the strengthening of the critical-thinking capacity, the will for social contribution and the accumulation of social capital.

### B. Structure of Undergraduate Program

The undergraduate program is organized into eight semesters. There are two academic semesters in each academic year. Each academic semester consists of about thirteen teaching weeks. For the award of the BSc Degree in Economics students are required to pass a total of 36 *semester-long economic courses* and complete with at least a "passing" grade 2 *English-language courses*.

The Bachelor's Program consists of compulsory courses, which every student must take (*core courses*), and courses that can be chosen by students according to their special interests (*elective courses*). In the current academic year 2020-2021, students are offered a total of 56 semester-long economic courses. Of these, 20 are compulsory courses and 36 are elective courses. Nine out of the 36 elective courses are provided by



the *Department of Business Administration*. Students normally take 4 or 5 courses (core/elective) per semester. Some courses have recommended prerequisites, so they should not be taken in the early years of the students' studies.

Each course is offered only once in an academic year, i.e., either in the fall semester, October-January, or in the spring semester, February-June. The exams for all fall-semester courses are held at the end of January – beginning of February. Students who fail in any of these courses can participate in a resit examination in September. The exams for all spring-semester courses are held in June, and, if a student fails in these exams, he/she can again participate in the September resit examinations. Under the Greek educational system, students should complete their studies within a period of  $n+2$  years, where  $n$  is the normal degree-program period (i.e. 4 years).

Courses may consist of only lectures, or lectures and seminars/tutorials, or lectures and practical work in the computer lab of the Department. Assessment is normally by written examinations. The grades range from zero (0) to ten (10). The minimum passing grade is five (5). The final graduation grade is a weighted average of the grades in the  $36 + 2$  semester-long courses which the students have successfully completed during their 4-year studies. The weights correspond to the courses' ECTS credits.

The Department of Economics also gives students the opportunity to participate in a *placement program* as part of their degree-studies. Placement is treated as a 4<sup>th</sup>-year (spring semester) non-compulsory elective course, corresponding to 3 ECTS credits. Placement does not count towards the final degree-grade, but a 'certificate of placement' is attached to the students' transcript of records.

Every student is assigned to a *personal tutor* who is a full-time member of the Department's academic staff. His/her role is to provide support and guidance on academic matters, as well as on any other more personal matters that may affect students' life.

### C. Undergraduate Curriculum 2020-2021



Listed below are the undergraduate courses offered by the Department of Economics in the academic year 2020-2021. Each course has a three-digit ECTS code. The first digit indicates the *level* of the course. There are four levels, 1, 2, 3 and 4. Courses whose first digit is 3 or 4 should best be taken in the third or fourth year of study (almost all of them have courses of levels 1 or 2 as recommended prerequisites). The other two digits stand for the numbering of the courses within the Department.

<b>Compulsory Core Courses</b>	<b>Course code</b>
1. Principles of Economics I	ECO_101N
2. Principles of Economics II	ECO_102N
3. Mathematics for Economists I	ECO_111N
4. Mathematics for Economists II	ECO_112N
5. Statistics I	ECO_121N
6. Statistics II	ECO_122N
7. Economic History	ECO_130
8. Introduction to Information Systems & Applications	ECO_150
9. Microeconomics I	ECO_201N
10. Microeconomics II	ECO_202N
11. Macroeconomics I	ECO_203N
12. Macroeconomics II	ECO_204N
13. Public Economics	ECO_312
14. Econometrics	ECO_320
15. Economic Policy	ECO_350
16. Economics of the Firm	ECO_355
17. Economics of Industrial Organization	ECO_401
18. Development Economics	ECO_410
19. Labour Economics	ECO_420
20. International Trade Theory & Policy	ECO_430
<b>Compulsory Foreign Language Courses</b>	<b>Course Code</b>
1. English for Economists I	1E01
2. English for Economists II	1E02

<b>Elective Courses</b>	<b>Course Code</b>
1. Accounting I	ECO_131
2. Accounting II	ECO_132
3. Introduction to the Greek Economy	ECO_154
4. Introduction to Marketing-Management	ECO_220
5. Statistics with Computer	ECO_222
6. Greek Economic History	ECO_230
7. Economic Geography	ECO_240
8. Digital Economy	ECO_241
9. Financial Economics	ECO_322
10. Investment Appraisal	ECO_330
11. Financial Analysis & Management	ECO_332
12. History of Economic Thought	ECO_340
13. Data Analysis	ECO_351
14. Operational Research	ECO_352
15. Economics of Natural Resources & the Environment	ECO_360
16. Regional Economics	ECO_361
17. Energy Economics	ECO_393
18. Economics of Education	ECO_396
19. Applied Econometrics	ECO_421
20. Database Systems	ECO_424
21. Economics of Innovation & Technology	ECO_441
22. Mathematical Economics	ECO_450
23. Research Methodology in Economics	ECO_452

24. Agricultural Economic Policy	ECO_465
25. Portfolio Management	ECO_472
26. Money and Banking	ECO_482
27. Special Topics in Macroeconomics	ECO_492
28. Business Administration I	ECO_DE113 Offered by the Department of Business Administration
29. Business Administration II	ECO_DE313 Offered by the Department of Business Administration
30. Special Topics in Political Economy & Quantitative Analysis	ECO_DE225 Offered by the Department of Business Administration
31. Simulation of Business Processes (not available in 2020-2021)	ECO_DE141 Offered by the Department of Business Administration
32. Business Strategy I	ECO_DE413 Offered by the Department of Business Administration
33. Financial Management	ECO_DE423 Offered by the Department of Business Administration
34. Introduction to Civil & Commercial Law	ECO_DE115 Offered by the Department of Business Administration
35. Business Law	ECO_DE227 Offered by the Department of Business Administration
36. Labour Law & Labour Relations	ECO_DE205 Offered by the Department of Business Administration

### C. Program Plan - BSc in Economics

A course-summary table per-semester is provided below. The columns following the course titles, indicate weekly lecture hours (L) and weekly tutorial/laboratory hours (T/L). The last column shows the number of ECTS credits.

#### FIRST YEAR, 1<sup>st</sup> Semester (Fall)

Code course	Course title	Weekly Hours		ECTS credits
		L	T/L	
ECO_101N	Principles of Economics I	4	2	8
ECO_111N	Mathematics for Economists I	4	2	8
ECO_121N	Statistics I	4	2	8
ECO_150	Introduction to Information Systems & Applications	3	2	6
<b>Total ECTS credits</b>				<b>30</b>

#### FIRST YEAR, 2<sup>nd</sup> Semester (Spring)

Code course	Course title	Weekly Hours		ECTS credits
		L	T/L	
ECO_102N	Principles of Economics II	4	2	8
ECO_112N	Mathematics for Economists II	4	2	8
ECO_122N	Statistics II	4	2	8
ECO_130	Economic History	3		6
<b>Total ECTS credits</b>				<b>30</b>

### SECOND YEAR, 3<sup>rd</sup> Semester (Fall)

Code course	Course title	Weekly Hours		ECTS credits
		L	T/L	
ECO_201N	Microeconomics I	4	2	8
ECO_203N	Macroeconomics I	4	2	8
1E01	English for Economists I	3		2
	<b><u>and 2</u></b> elective courses chosen from:			
ECO_131	Accounting I	3		6
ECO_154	Introduction to the Greek Economy	3		6
ECO_220	Introduction to Marketing-Management	3		6
ECO_DE113	Business Administration I	3		6
ECO_DE115	Introduction to Civil & Commercial Law	3		6
<b>Total ECTS credits</b>				<b>30</b>

### SECOND YEAR, 4<sup>th</sup> Semester (Spring)

Code course	Course title	Weekly Hours		ECTS credits
		L	T/L	
ECO_202N	Microeconomics II	4	2	8
ECO_204N	Macroeconomics II	4	2	8
1E02	English for Economists II	3		2
	<b><u>and 2</u></b> elective courses chosen from:			
ECO_132	Accounting II	3	2	6
ECO_222	Statistics with Computer	2	2	6
ECO_240	Economic Geography	3		6
ECO_241	Digital Economy	3	2	6
<b>Total ECTS credits</b>				<b>30</b>

### THIRD YEAR, 5<sup>th</sup> Semester (Fall)

Code course	Course title	Weekly Hours		ECTS credits
		L	T/L	
ECO_320	Econometrics	3	1	6
ECO_355	Economics of the Firm	3		6
	<b><u>and 3</u></b> elective courses chosen from:			
ECO_322	Financial Economics	3		6
ECO_340	History of Economic Thought	3		6
ECO_393	Energy Economics	3		6
ECO_DE313	Business Administration II	3		6
ECO_DE225	Special Topics in Political Economy & Quantitative Analysis	3		6
ECO_DE227	Business Law	3		6

(for outgoing ERASMUS students only)	Course ERASMUS 1(X)	3		<b>6</b>
(for outgoing ERASMUS students only)	Course ERASMUS 2(X)	3		<b>6</b>
(for outgoing ERASMUS students only)	Course ERASMUS 3(X)	3		<b>6</b>
<b>Total ECTS credits</b>				<b>30</b>

### THIRD YEAR, 6<sup>th</sup> Semester (Spring)

Code course	Course title	Weekly Hours		ECTS credits
		<b>L</b>	<b>T/L</b>	
ECO_312	Public Economics	3		<b>6</b>
ECO_350	Economic Policy	3		<b>6</b>
	<b><u>and</u> 3 elective courses</b> chosen from:			
ECO_230	Greek Economic History	3		<b>6</b>
ECO_332	Financial Analysis & Management	3	2	
ECO_352	Operational Research	3	2	<b>6</b>
ECO_361	Regional Economics	3		<b>6</b>
ECO_492	Special Topics in Macroeconomics	3		<b>6</b>
ECO_DE205	Labour Law & Labour Relations	3		<b>6</b>
(for outgoing ERASMUS students only)	Course ERASMUS 1(X)	3		<b>6</b>
(for outgoing ERASMUS students only)	Course ERASMUS 2(X)	3		<b>6</b>
(for outgoing ERASMUS students only)	Course ERASMUS 3(X)	3		<b>6</b>
<b>Total ECTS credits</b>				<b>30</b>

### FOURTH YEAR, 7<sup>th</sup> Semester (Fall)

Code course	Course title	Weekly Hours		ECTS credits
		<b>L</b>	<b>T/L</b>	
ECO_430	International Trade Theory & Policy	3		<b>6</b>
ECO_410	Development Economics	3		<b>6</b>
	<b><u>and</u> 3 elective courses</b> chosen from:			
ECO_351	Data Analysis	3	1	<b>6</b>
ECO_360	Economics of Natural Resources & Environment	3		<b>6</b>
ECO_441	Economics of Innovation & Technology	3	1	<b>6</b>
ECO_450	Mathematical Economics	3		<b>6</b>
ECO_452	Research Methodology in Economics	3		<b>6</b>
ECO_465	Agricultural Policy	3		<b>6</b>
ECO_DE413	Business Strategy I	3		<b>6</b>
(for outgoing ERASMUS students only)	Course ERASMUS 1(X)	3		<b>6</b>
(for outgoing ERASMUS students only)	Course ERASMUS 2(X)	3		<b>6</b>
(for outgoing ERASMUS students only)	Course ERASMUS 3(X)	3		<b>6</b>
<b>Total ECTS credits</b>				<b>30</b>



### FOURTH YEAR, 8<sup>th</sup> Semester (Spring)

Code course	Course title	Weekly Hours		ECTS credits
		L	T/L	
ECO_401	Economics of Industrial Organization	3		6
ECO_420	Labour Economics	3	2	6
	<b><i>and</i> 3 elective courses chosen from:</b>			
ECO_330	Investment Appraisal	3		6
ECO_396	Economics of Education	3		6
ECO_421	Applied Econometrics		3	6
ECO_424	Database Systems	3	1	6
ECO_472	Portfolio Management	3		6
ECO_482	Money and Banking	3	1	6
ECO_DE423	Financial Management I	3		6
(for outgoing ERASMUS students only)	Course ERASMUS 1(X)	3		6
(for outgoing ERASMUS students only)	Course ERASMUS 2(X)	3		6
(for outgoing ERASMUS students only)	Course ERASMUS 3(X)	3		6
ECO_499 (optional)*	Placement			3
<b>Total ECTS credits</b>				<b>30</b>

\*not counted towards the final degree-grade & total ECTS

<b>BSc Degree in Economics</b>					<b>Total ECTS</b> <b>240</b>
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Detailed information about the aim, content, method of assessment, reading etc. for the BSc courses can be found in the Annex (pp.25) and also electronically at <http://www.econ.upatras.gr/en/undergraduate/courses>



## ERASMUS Program

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The Department of Economics actively participates in the *LLP ERASMUS+* Program and has bilateral student/staff exchange agreements with a number of European universities, including universities in France, Germany, Italy, Finland, Hungary, Czech Republic, Hungary, Poland and Slovakia.

Information about the partner universities and about application procedures for incoming ERASMUS students can be found at <http://www.econ.upatras.gr/en/Erasmus>.

ERASMUS students coming to the Department of Economics can choose taught courses in English from a list of such courses administered jointly with the Department of Business Administration. All incoming ERASMUS students are under the close supervision of the ERASMUS Departmental Coordinator, Assoc. Prof. Athina Zervoyianni ([athina@upatras.gr](mailto:athina@upatras.gr))



**List of ERASMUS Courses, available to incoming Erasmus students in the Spring Term of 2020-2021(\*)**



<b>ERASMUS COURSES from the Department of Economics (offered on-line)</b>			
<b>Member of academic staff responsible</b>	<b>Course Title</b>	<b>ECTS</b>	<b>Semester</b>
M. Tzagarakis & V. Daskalou (Department of Economics)	Introduction to Information Systems & Applications <a href="http://www.econ.upatras.gr/en/undergraduate/courses/introduction-computers">http://www.econ.upatras.gr/en/undergraduate/courses/introduction-computers</a>	6	Spring
A. Polymenis (Department of Economics)	Statistics II <a href="http://www.econ.upatras.gr/en/undergraduate/courses/statistics-ii">http://www.econ.upatras.gr/en/undergraduate/courses/statistics-ii</a>	8	Spring
A. Zervoyianni (Department of Economics)	Macroeconomics II <a href="http://www.econ.upatras.gr/en/undergraduate/courses/macroeconomics-ii">http://www.econ.upatras.gr/en/undergraduate/courses/macroeconomics-ii</a>	8	Spring
E. Tzagarakis & V. Daskalou (Department of Economics)	Digital Economy <a href="http://www.econ.upatras.gr/en/undergraduate/courses/issues-digital-economy">http://www.econ.upatras.gr/en/undergraduate/courses/issues-digital-economy</a>	6	Spring
E. Goulas (Department of Economics)	Development Economics <a href="http://www.econ.upatras.gr/en/undergraduate/courses/development-economics">http://www.econ.upatras.gr/en/undergraduate/courses/development-economics</a>	6	Spring
C. Kounetas (Department of Economics)	Energy Economics <a href="http://www.econ.upatras.gr/en/undergraduate/courses/energy-economics">http://www.econ.upatras.gr/en/undergraduate/courses/energy-economics</a>	6	Spring
N. Giannakopoulos (Department of Economics)	Labour Economics <a href="http://www.econ.upatras.gr/en/undergraduate/courses/labour-economics">http://www.econ.upatras.gr/en/undergraduate/courses/labour-economics</a>	6	Spring
I. Venetis (Department of Economics)	Applied Econometrics <a href="http://www.econ.upatras.gr/en/undergraduate/courses/applied-econometrics">http://www.econ.upatras.gr/en/undergraduate/courses/applied-econometrics</a>	6	Spring
<b>ERASMUS COURSES from the Department of Business Administration</b>			
G. Manousakis (Dep. of Business Administration)	Further Operational Research Techniques in Decision Making <a href="https://www.bma.upatras.gr/images/erasmusgiann.pdf">https://www.bma.upatras.gr/images/erasmusgiann.pdf</a>	5	Spring
B. Myloni (Dep. of Business Administration)	International Management <a href="https://www.bma.upatras.gr/images/MILERASMUSIM.pdf">https://www.bma.upatras.gr/images/MILERASMUSIM.pdf</a>	5	Spring
D. Koutoulas (Dep. of Business Administration)	Case Studies in Tourism <a href="https://www.bma.upatras.gr/index.php/en/foititika-themata/erasmus-courses">https://www.bma.upatras.gr/index.php/en/foititika-themata/erasmus-courses</a>	5	Spring
V. Delli (Dep. of Business Administration)	Language Awareness and Introduction to Business English I <a href="https://www.bma.upatras.gr/images/ENGLISH11.pdf">https://www.bma.upatras.gr/images/ENGLISH11.pdf</a>	5	Spring
V. Delli	English IV - Business Communication		

(Dep. of Business Administration)	<a href="https://www.bma.upatras.gr/images/ENGLISH44.pdf">https://www.bma.upatras.gr/images/ENGLISH44.pdf</a>	5	Spring
	<b>ERASMUS COURSES from the Greek Language Lab</b>		
Greek Language and Culture Lab	Greek Language Course - Modern Greek I & II <a href="http://greeklab.upatras.gr/about-the-laboratory/">http://greeklab.upatras.gr/about-the-laboratory/</a>	6	Spring
Greek Language and Culture Lab	Introduction to Greek Civilization & Culture <a href="http://greeklab.upatras.gr/about-the-laboratory/">http://greeklab.upatras.gr/about-the-laboratory/</a>	3	Spring

(\*) Due to the COVID-19 pandemic, the Department of Economics has suspended its ERASMUS Program in the autumn term of 2020-2021



# List of useful addresses

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### INTERNATIONAL RELATIONS OFFICE

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*Manager's Office*, Tel. +30-2610- 997970  
Student accommodation & cultural events, Tel. +30-2610-997968  
Health services (student support), Tel. +30-2610-996151

### UNIVERSITY LIBRARY & INFORMATION

Management and secretariat, Tel. +30-2610-969613-15  
Item acquisitions & bibliographical information, Tel. +30-2610-969616  
IT Services, Tel. +30-2610-969631/32

### FOREIGN-LANGUAGES CENTRE

Secretary, Tel. +30-2610-997370

**STUDENT ACCOMMODATION (NATIONAL INSTITUTE OF YOUTH – IN CAMPUS)**

*Manager*, Tel. +30-2610-992362

Call center, Tel. +30-2610- 992359/2360

Management, Tel. +30-2610- 992360 (int. 207-208)

**STUDENT ACCOMMODATION (IN PROASTIO – NEAR CAMPUS)**

Office, Tel. +30-2610-434820

Ground floor, Tel. +30-2610-453203

**OTHER SERVICES**

General Regional University Hospital of Patras, Tel. +30-2610-999111

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Cafeteria-Restaurant «Parko Irinis», Tel. +30-2610-997839

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# Annex–Detailed Description of BSc Courses

## FIRST YEAR, 1st Semester (Fall)

### PRINCIPLES OF ECONOMICS I

#### COURSE OUTLINE

##### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 101N	<b>SEMESTER OF STUDIES</b>	1st
<b>COURSE TITLE</b>	PRINCIPLES OF ECONOMICS I		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures and tutorials		4 (lect), 2 (tut)	8
<b>COURSE TYPE</b>		Background Course, General Skills, Skill Development	
<b>PREREQUISITE COURSES:</b>		No	
<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/ECON1294/">https://eclass.upatras.gr/courses/ECON1294/</a>	

##### 2. LEARNING OUTCOMES

<b>Learning outcomes</b> <i>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.</i>
<p>Upon successful completion of the course the student will be able to:</p> <ul style="list-style-type: none"> <li>• Understand the key issues in the economic analysis of the behavior of producers and consumers, using skills and tools that have accumulated during secondary education, as well as from views emerging from modern developments at the cutting edge of economic science.</li> <li>• Understand the importance of scarcity in every aspect of economic life.</li> <li>• Understand the difference between perfectly competitive and non-competitive markets.</li> <li>• Be able to analyze different types of market (monopoly, oligopoly and competitive market).</li> <li>• Analyze the effects of changes in demand and supply on prices and quantities of goods and services.</li> <li>• Solve problems of minimizing production costs.</li> <li>• Analyze the behavior of producers in a competitive market in the short and long run.</li> <li>• Solve problems relating to the calculation of the surplus of the consumer and the producer.</li> </ul>
<b>General Competences</b> <i>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?</i>
<ul style="list-style-type: none"> <li>• Search, analyze and synthesize data and information, using the necessary technologies</li> </ul>

- Adapt to new situations
- Decision making
- Autonomous work
- Team work
- Respect for diversity and multiculturalism
- Demonstrate social, professional and ethical responsibility and gender awareness
- Exercise of criticism and self-criticism
- Promote free, creative and inductive thinking

### 3. COURSE CONTENT

- Introductory issues
- Demand and supply of goods and services
- Market equilibrium
- Definition and calculation of elasticity
- Market and state intervention - price control
- Theory of production and cost
- Theory of the firm and perfect competition
- Monopoly
- Monopolistic competition
- Oligopoly

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face-to-face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of Information and Communication Technologies (ICTs) (e.g. power point) in teaching. The lectures for each chapter are uploaded on the e-class platform in the form of ppt files, which the enrolled students can freely download.	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures (3 hours per week x 13 weeks)	39 hours
	Tutorials (2 hours per week x 13 weeks)	29 hours
	Individual work	122 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>200 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<p>The assessment is based on student's performance in the written final examination (80%) and on a mid-term examination during the semester (20%). The overall course grade is the sum of a) the final exam grade plus b) 20 percent of the mid-term exam grade.**</p> <p>Written examinations deal with issues of understanding basic concepts, comparative evaluation of competitive theories and solving numerical problems related to the content of the course. Exam papers are of a multiple-choice format and students are asked to choose the correct answer (40 questions) from a list of 5 alternative answers (per question). The evaluation criteria are described in the Course Syllabus, which is posted on the platform eclass.upatras.gr.</p> <p>** The above student evaluation method is a pilot one and will be re-examined at the end of academic year 2018-2019</p>	

### 5. ATTACHED BIBLIOGRAPHY

- *Required textbook*  
 Sloman J., Wride A., Garratt D. (2017) «Economics», Broken Hill Publishers Ltd, ISBN: 978-9963-



274-41-3. (In Greek)
Parkin M., Powell M., Matthews K. (2013). «Principles of Economics». Athens: Kritiki A.E., ISBN: 978-960-218-877-4 (In Greek)
Veletzas, K. (2011). «Introduction to Economic Analysis. Athens: Benou E., ISBN: 978-960-359-099-6 (In Greek)
- <i>Related Journals</i> Journal of Economic Literature, Journal of Economic Perspectives, Economic Policy

## MATHEMATICS FOR ECONOMISTS I

### COURSE OUTLINE

#### 1. GENERAL

1. GENERAL			
SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	ECONOMICS		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECO 111N	SEMESTER OF STUDIES	1st
COURSE TITLE	MATHEMATICS FOR ECONOMISTS I		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures and tutorials		4(lect.), 1(tut.)	8
COURSE TYPE	Background, General Knowledge, Skills Development		
PREREQUISITE COURSES:	No		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBPAGE (URL)	<a href="https://eclass.upatras.gr/courses/ECON1324/">https://eclass.upatras.gr/courses/ECON1324/</a> <a href="https://eclass.upatras.gr/courses/ECON1240/">https://eclass.upatras.gr/courses/ECON1240/</a>		

#### 2. LEARNING OUTCOMES

<b>Learning outcomes</b> <i>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.</i>
<p>Basic mathematical concepts such as sets, functions and introduction to differential - integral calculus and optimization theory (functions of one variable without limitations) are presented. Emphasis is placed on the understanding and use of mathematics in economic analysis and the development of model solving serving applications in the areas of economic science. Upon successful completion of the course the student will be able to:</p> <p>1) Knowledge</p> <ul style="list-style-type: none"> <li>• understand concepts of economic theory using mathematical methods</li> </ul> <p>2) Skills</p> <ul style="list-style-type: none"> <li>• use of Excel for introductory level calculations and presentations</li> <li>• use of mathematical methods in economic science (e.g. modeling)</li> </ul> <p>3) Capabilities</p> <ul style="list-style-type: none"> <li>• uses of different ways of thinking (e.g. inductive, productive) to develop specific problem-</li> </ul>

solving strategies • presents technical results in a clear and comprehensible manner
<b>General Competences</b> <i>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?</i>
• Search analysis and synthesis of facts and information using the necessary technologies • Adaptation to new situations • Decision making • Autonomous (Independent) work • Group work • Exercise of criticism and self-criticism • Promotion of free, creative and inductive thinking

### 3. COURSE CONTENT

• Sets, Numbers • Functions • Continuity, Introduction to limits, Introduction to the differentiation of univariate functions - Chain rule - Elasticity applications • Indeterminate limits (L'Hôpital's rule) • The concept of differential, higher order derivatives, higher order differentials • Function analysis using derivatives – Optimization (Maximization and minimization) of univariate functions • Taylor approximation • Economic applications • Integration, Integration Methods, Definite, indefinite and generalized integrals • Economic applications of integrals • Sequences and series • Convergence or divergence of series - Convergence criteria, Power Series
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### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Lectures and tutorials face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	• Support Learning through the e-class platform • Using Excel and open source programs to plot functions	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures (4 hours per week x 13 weeks)	52 hours
	Tutorials (1 hour per week x 13 weeks) - solving of representative problems	13 hours
	Hours for private study	135 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>200 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	The overall course grade is the sum of a) the final exam grade plus b) 20 percent of the mid-term exam grade*  *The above student evaluation method is a pilot one and will be re-examined at the end of academic year 2018-2019.	

### 5. ATTACHED BIBLIOGRAPHY

- <i>Suggested bibliography (In Greek):</i> ΠΡΟΣΚΛΗΣΗ ΣΤΑ ΜΑΘΗΜΑΤΙΚΑ ΟΙΚΟΝΟΜΙΚΩΝ ΚΑΙ ΔΙΟΙΚΗΤΙΚΩΝ ΕΠΙΣΤΗΜΩΝ ΤΟΜΟΣ Α', Κωδικός Βιβλίου στον Εύδοξο: 12537573, Έκδοση: 1η έκδοση/2011, Συγγραφείς: ΛΟΥΚΑΚΗΣ ΜΑΝΩΛΗΣ, ISBN: 978-960-6706-51-6, Τύπος: Σύγγραμμα, Διαθέτης (Εκδότης): "σοφία"
--

Ανώνυμη Εκδοτική & Εμπορική Εταιρεία

Μαθηματικές μέθοδοι στα οικονομικά, Κωδικός Βιβλίου στον Εύδοξο: 31755, Αριθμός τόμου: Τόμος 1, Έκδοση: 1η εκδ./2007, Συγγραφείς: Ξεπαπαδέας Αναστάσιος Π., Γιαννίκος Ιωάννης Χ., ISBN: 978-960-01-1168-2, Τύπος: Σύγγραμμα, Διαθέτης (Εκδότης): Γ. ΔΑΡΔΑΝΟΣ - Κ. ΔΑΡΔΑΝΟΣ Ο.Ε.

*-Other Greek-language bibliography:*

Ε. Καβουσανός, Εφαρμογές Μαθηματικού Λογισμού (Β έκδοση), Εκδ. Γ. Μπένου, Αθήνα, 2006

Η. Φλυτζάνης, Μαθηματικά για Οικονομολόγους Ι, Εκδ. Γ. Μπένου, Αθήνα, 2008

Μ. Λουκάκης, Μαθηματικά Οικονομικών Επιστημών, Τόμοι Α και Β, Εκδ. σοφία, Θεσσαλονίκη, 2002

Α. Κιντής & Taro Yamane, Μαθηματικά Οικονομικο-Διοικητικών Επιστημών, Τόμος Α & Β, Εκδ. Gutenberg

*-Other Foreign language bibliography:*

Hoy, M., J. Livernois, C. McKenna, R. Rees and T. Stengos (2001), Mathematics for Economics, MIT Press.

Hoy, M., J. Livernois, C. McKenna, R. Rees and T. Stengos (2001), Student's Solutions Manual for Mathematics for Economics, MIT Press.

Pemberton, M. and N. Rau (2001), Mathematics for Economists: An Introductory Textbook, Manchester University Press

Klein, M., 2002. Mathematical methods in Economics. Adisson-Wesley Press.

Bailey, D., 1999. Mathematics in Economics. McGraw-Hill.

*-Useful Internet Addresses:*

<http://www.economicsnetwork.ac.uk/teaching/text/mathsforeconomists.htm>

<http://tutorial.math.lamar.edu/Classes/Calcl/Calcl.aspx>

*-Related scientific journals:*

<https://www.journals.elsevier.com/journal-of-mathematical-economics>

## STATISTICS I

### COURSE OUTLINE

#### 1. GENERAL

SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	ECONOMICS		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECO 121N	SEMESTER OF STUDIES	1st
COURSE TITLE	STATISTICS I		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures and tutorials		4 (lect.), 2 (tut.)	8

<b>COURSE TYPE</b>	Field of Science, Skill Development		
<b>PREREQUISITE COURSES:</b>	No		
<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://www.econ.upatras.gr/el/undergraduate/courses/statistics1">https://www.econ.upatras.gr/el/undergraduate/courses/statistics1</a>		

## 2. LEARNING OUTCOMES

### Lerning outcomes

By the end of this course the student are expected to:

1. Understand and apply descriptive statistics. Students learn how to use tables and graphs in order to describe practical situations
2. Have basic knowledge of elementary probability theory and of random variables.
3. 4. Understand theory of basic probability distributions and apply it in practical examples.

### General Abilities

By the end of this course the student will, furthermore, have developed the following abilities and skills:

1. Ability to exhibit knowledge and understanding of the essential facts, concepts, theories and applications which are related to introductory statistics and probability theory.
2. Ability to adopt and apply methodology for solving problems in the fields of descriptive statistics, probability theory and probability distributions.

Other more general abilities (from the list above):

- *Adapting to new situations*
- *Autonomous (Independent) work*
- *Promotion of free, creative and inductive thinking*
- *Work design and management*

## 3. COURSE CONTENT

Population, sample, sampling methods, variables. Statistical data, tables, figures. Frequencies. Measures of central tendency. Measures of dispersion. Moments, measures of asymmetry and kurtosis. Introduction to probability theory. Density and distribution functions. Distributions for discrete random variables (Binomial, Hyper geometric, Poisson, Geometric). Distributions for continuous random variables. Normal distribution. Parameters of bivariate distributions. Covariance, correlation coefficient.

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face lectures and tutorials.
<b>USE OF INFORMATION AND COMMUNICATION</b>	Use of e-class.

<b>TECHNOLOGIES</b>		
<b>TEACHING ORGANIZATION</b>	<b>Δραστηριότητα</b>	<b>Φόρτος Εργασίας Εξαμήνου</b>
	Lectures (4 hours per week x 13 weeks)	52 hours (4x13)
	Tutorials (2 hours per week x 13 weeks) - solving of representative problems	26 hours (2x13)
	Hours for private study of the student	122
<b>STUDENT ASSESMENT</b>	<p>The overall course grade is the sum of            (a) The final exam grade plus            (b) 20 percent of the mid-term examination grade. This examination is elective.</p> <p>The above student evaluation method is a pilot one and will be re-examined at the end of academic year 2018-2019.</p>	

## 5. RECOMMENDED LITERATURE

- Keller, G. 2010. Statistics for economics and business administration. In Greek. Epikentro publications, Thessaloniki.
- Daras I. T. and Sypsas P. 2010. Probability and Statistics- theory and applications. In Greek. Ziti publications, Athens.
- Papadimitriou, J. 2005. Descriptive Statistics. In Greek. Typothito publications, Athens.
- Aczel, D. A. & Sounderpandian, J. 2016. Statistical thinking in the business world. In Greek. P. C. Paschalidis Medical publications, Athens.
- Kenkel J. L. 1989. Introductory Statistics for Management and Economics. Pws Pub Co Publications, ISBN: 9780534916930
- Jarrell S. B. 1993. Basic Statistics. McGraw- Hill Education, ISBN: 9780697215994

-Related Journals

Journal of the Royal Statistical Society A

# INTRODUCTION TO INFORMATION SYSTEMS & APPLICATIONS

## COURSE OUTLINE

### 1. GENERAL

1. GENERAL			
SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	ECONOMICS		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECO 150	SEMESTER OF STUDIES	1st
COURSE TITLE	INTRODUCTION TO INFORMATION SYSTEMS & APPLICATIONS		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures (L) and Lab exercises (LE)		3 (L), 2 (LE)	6
		5	6
COURSE TYPE	Skills Development		
PREREQUISITE COURSES:	No		

<b>TEACHING AND ASSESSMENT LANGUAGE:</b>	Greek, English
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>	Yes (in English)
<b>COURSE WEBPAGE (URL)</b>	<a href="http://www.econ.upatras.gr/en/undergraduate/courses/introduction-computers">http://www.econ.upatras.gr/en/undergraduate/courses/introduction-computers</a> <a href="https://eclass.upatras.gr/courses/ECON1242/">https://eclass.upatras.gr/courses/ECON1242/</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.*

The aim of the course is to create basic competences for the use of computing systems and their applications as the main tools for data processing. After successfully completing the course, students will be able to:

- Describe the role and importance of computers in the field of Economics
- Identify the basic elements of the computer's architecture and their role in computations
- Define the methods for data representation, especially for numerical data using different numerical systems
- Recognize the role and importance of algorithms and use algorithmic thinking when solving statistical problems using computers.
- Employ methods for statistical data processing suitable for computers
- Utilize spreadsheets and the Python programming language for statistical data processing tasks of open data
- Comparing and assessing the different tools for statistical data processing and draw conclusions on their strengths and weaknesses.

### General Competences

*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, analyze and aggregate data and information with the use of the proper tools and technologies
- Manage and conduct team projects

## 3. COURSE CONTENT

Role and importance of computers in the field of Economics. Evolution of computing machines and their architecture. Architecture of contemporary computing systems. Methods of data representation in the context of computers. Number systems and their role in computing. Methods and algorithms to address statistical problems using computers. Techniques to address statistical problems using a) Spreadsheets (Excel / OpenOffice Calc) and b) the programming language Python. Using open data to apply and study statistical processing methods towards understanding the data using both tools. Comparison and evaluation of statistical tools in the context of data processing problems.

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face-to-face
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>• Slides and notes to support lectures</li> <li>• Spreadsheet software and the Python programming language for demonstration and practice</li> <li>• Use of the E-Learning platform eclass in order to: <ul style="list-style-type: none"> <li>○ Organize the course material (slides, notes, examples, code snippets etc)</li> <li>○ Perform weekly online quizzes to evaluate the understanding of the related course material</li> <li>○ Hand in homeworks</li> <li>○ Communicate with the students and the class</li> </ul> </li> </ul>



	• Open courses and open educational material	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	39 hours
	Lab exercises	26 hours
	Team Projects	52 hours
	Individual quizzes and Self-study	33 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	1. Two (2) Team Projects on using software to perform statistical data processing and analysis: 30% 2. Final exam (Short and problem-solving questions: 70%)  The evaluation criteria are available to students at eclass <a href="#">here</a> .	

## 5. ATTACHED BIBLIOGRAPHY

### - Suggested bibliography:

Nissan, N., Schocken, S.: The Elements of Computing Systems: Building a Modern Computer from First Principles, Massachusetts Institute of Technology, ISBN-13: 978-0262640688 , ISBN-10: 0262640686 , 2005

A Byte of Python, Available from <https://python.swaroopch.com/>

McKinney, W.: Python for Data Analysis, O'Reilly Media, 2012

Nelson, S.L., Nelson, E. C.: Excel Data Analysis For Dummies, Wiley and Sons Inc, ISBN-10: 1118898095, 2014

Berk, K., Carey, P. M: Data Analysis with Microsoft Excel, Richard Stratton Publishing, 3rd Edition, ISBN-10: 0538494670

## FIRST YEAR, 2<sup>nd</sup> Semester (Spring)

### PRINCIPLES OF ECONOMICS II

#### COURSE OUTLINE

##### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 102N	<b>SEMESTER OF STUDIES</b>	2nd
<b>COURSE TITLE</b>	PRINCIPLES OF ECONOMICS II		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures and tutorials		4 (lect.), 2 (tut.)	8
<b>COURSE TYPE</b>	Field of Science		
<b>PREREQUISITE COURSES:</b>	Suggested prerequisites: Principles of Economics I		
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>	Greek		
<b>THE COURSE IS</b>	No		

<b>OFFERED TO ERASMUS STUDENTS</b>	
<b>COURSE WEBPAGE (URL)</b>	<a href="https://www.econ.upatras.gr/en/undergraduate/courses/principles-economics-ii">https://www.econ.upatras.gr/en/undergraduate/courses/principles-economics-ii</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.*

The course provides students with the basic concepts and theories which facilitate the understanding of how an economy works as a coordinated whole. It aims to provide a simple yet rigorous framework for understanding real macroeconomic events. Students are expected to be able to apply the tools listed in the course in order to analyze relatively simple macroeconomic issues.

After completing this course, students will be able to:

- Reflect the basic concepts and principles of macroeconomics.
- Use different economic indicators and models to explain economic phenomena.
- Assess macroeconomic issues and approach the analysis of the effectiveness of government economic policy.
- Avoid mistakes often made in the popular press about the causes and consequences of long-term growth and economic fluctuations.
- Prepare for more advanced studies in macroeconomics.

### General Competences

*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, analysis and synthesis of facts and information, using the necessary technologies  
Decision making  
Autonomous (Independent) work

## 3. COURSE CONTENT

Introduction to Macroeconomics. Macroeconomic Data. Productivity, Output and Employment. Consumption, Savings and Investment. Savings and Investment in an Open Economy. Long-term Economic Growth. Asset Markets, Money and Prices. Exchange Rates and Macroeconomic Policy in an Open Economy. Public Expenditure and Financing.

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Lectures and tutorials face to face.	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of ICT in teaching and communication with students through the e-class platform.	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	52 hours (4X13)
	Tutorials	26 hours (2X13)
	Private study	122 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>200 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<p>The overall course grade is the sum of a) the final exam grade plus b) 20 percent of the mid-term exam grade*.</p> <p>* The above student evaluation method is a pilot one and will be re-examined at the end of academic year 2018-2019.</p>	

## 5. ATTACHED BIBLIOGRAPHY

*-Recommended Literature:*

Abel, A. B., Bernanke, B. S. and Croushore D. 2017. Macroeconomics. Pearson.

Mankiw G. N. 2002. Macroeconomic Theory. Worth Publishers.  
Mankiw N. G. and Taylor P. M. 2016. Economics (Macroeconomics). Cengage.

*-Relevant scientific journals:*

Journal of Political Economy; American Economic Review

*-Relevant web sites:*

Bank of Greece: <http://www.bankofgreece.gr>

Hellenic Republic, Ministry of Finance: <http://www.minfin.gr>

International Monetary Fund: <http://www.imf.org>

European Central Bank: <https://www.ecb.europa.eu>

Financial Times: <https://www.ft.com>

The Economist: <https://www.economist.com>

## MATHEMATICS FOR ECONOMISTS II

### COURSE OUTLINE

#### 1. GENERAL

1. GENERAL			
SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	ECONOMICS		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECO 112N	SEMESTER OF STUDIES	2 <sup>nd</sup>
COURSE TITLE	MATHEMATICS FOR ECONOMISTS II		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures and tutorials		4(lect.), 1(tut.)	8
COURSE TYPE	Background, General Knowledge, Skills Development		
PREREQUISITE COURSES:	Suggested prerequisites: Mathematics for Economists I		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBPAGE (URL)	<a href="https://eclass.upatras.gr/courses/ECON1323/">https://eclass.upatras.gr/courses/ECON1323/</a> <a href="https://eclass.upatras.gr/courses/ECON1244/">https://eclass.upatras.gr/courses/ECON1244/</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.*

Mathematics for Economists II, is a course aiming at introducing students to basic mathematical concepts, linking them to sets of economic exercises that relate to real problems faced by economists. In this sense, the course forms the basis for the specific methodologies developed in individual curriculum courses (e.g. macroeconomics, microeconomics).

By the end of this course the student will be able to:

1) Knowledge

- Understand basic mathematical theory (concepts, theorems, proofs).
- Recognize the theory-related mathematical formulas and describe how to solve them

<p>2) Skills</p> <ul style="list-style-type: none"> <li>• Distinguish the different cases of mathematical problems and explain their use in relation to the mathematical problem posed.</li> <li>• Calculate basic mathematical concepts (e.g. maximization of a function, partial derivative calculation).</li> </ul> <p>3) Specific skills</p> <ul style="list-style-type: none"> <li>• Combine mathematical theory with economic problems.</li> <li>• Rebuild the economic problem (e.g. Maximize profit in a perfectly competitive market) and explain the solution.</li> <li>• Be able to evaluate, compare and support the solution.</li> </ul>
<p><b>General Competences</b></p> <p><i>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?</i></p> <p>By the end of this course the student will, have developed the following skills (general abilities):</p> <ul style="list-style-type: none"> <li>• Ability to exhibit knowledge and understanding of the essential facts, concepts, theories and applications related to the specific course.</li> <li>• Ability to apply this knowledge and understanding to the solution of problems.</li> </ul> <p>Generally, by the end of this course the student will, furthermore, have develop the following general abilities (from the list above):</p> <ul style="list-style-type: none"> <li>• Searching, analysis and synthesis of facts and information using the necessary technologies</li> <li>• Adaptation to new situations</li> <li>• Decision making</li> <li>• Autonomous (Independent) work</li> <li>• Group work</li> <li>• Exercise of criticism and self-criticism</li> <li>• Promotion of free, creative and inductive thinking</li> <li>• Respect to natural environment</li> <li>• Work design and management</li> </ul>

### 3. COURSE CONTENT

<ul style="list-style-type: none"> <li>• Functions of several variables: limits, continuity, partial derivatives,</li> <li>• Differentiation,</li> <li>• Maxima &amp; minina, Lagrange multipliers,</li> <li>• Difference equations, including: linear first order, second order with constant coefficients</li> <li>• Introduction to linear algebra (matrix properties, matrix inversion) &amp; linear systems, elasticity, partial elasticities,</li> <li>• Economic applications</li> </ul>
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### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Lectures and tutorials face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	<p>Use of Information and Communication Technologies (ICTs) (e.g. PowerPoint) in teaching. The lectures of each chapter are uploaded on the e-class platform, in the form of a series of ppt files, which the enrolled students can freely download.</p> <p>Exercises and self-assessment through open-ended questions in e-class are also available.</p>	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures (4 hours per week x 13 weeks)	52 hours
	Tutorials (1 hour per week x 13 weeks) - solving of representative problems	13 hours

	Hours for private study of the student and preparation of home-works)	135 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>200 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<p>The overall course grade is the sum of a) the final exam grade plus b) 20 percent of the mid-term exam grade*</p> <p>*The above student evaluation method is a pilot one and will be re-examined at the end of academic year 2018-2019.</p>	

## 5. ATTACHED BIBLIOGRAPHY

### - Suggested bibliography:

Loukakis M, *Invitation to the Mathematics of Economics and Social Sciences (Volume B)*, 1st Edition, 2014

Xepapadeas A.P., Giannikos I.X, *Mathematical Methods in Economics (Volume B)*, 1st 2009

### - Other Greek-language bibliography:

E. Καβουσανός, *Εφαρμογές Μαθηματικού Λογισμού (B έκδοση)*, Εκδ. Γ. Μπένου, Αθήνα, 2006

H. Φλυτζάνης, *Μαθηματικά για Οικονομολόγους I*, Εκδ. Γ. Μπένου, Αθήνα, 2008

A. Κιντής & Taro Yamane, *Μαθηματικά Οικονομικο-Διοικητικών Επιστημών, Τόμος A & B*, Εκδ. Gutenberg

### - Other Foreign language bibliography:

Hoy, M., J. Livernois, C. McKenna, R. Rees and T. Stengos (2001), *Mathematics for Economics*, MIT Press.

Hoy, M., J. Livernois, C. McKenna, R. Rees and T. Stengos (2001), *Student's Solutions Manual for Mathematics for Economics*, MIT Press.

Pemberton, M. and N. Rau (2001), *Mathematics for Economists: An Introductory Textbook*, Manchester University Press

Klein, M., 2002. *Mathematical methods in Economics*. Addison-Wesley Press.

Bailey, D., 1999. *Mathematics in Economics*. McGraw-Hill.

### - Useful Internet Addresses:

<http://www.economicsnetwork.ac.uk/teaching/text/mathsforeconomists.htm>

<http://tutorial.math.lamar.edu/Classes/Calcl/Calcl.aspx>

### - Related scientific journals:

<https://www.journals.elsevier.com/journal-of-mathematical-economics>

## STATISTICS II

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 122N	<b>SEMESTER OF STUDIES</b>	2nd
<b>COURSE TITLE</b>	STATISTICS II		

INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures, laboratory work and tutorials		4(lect.), 2 (lab/tut.)	8
COURSE TYPE		Field of Science (statistics) and Skills Development (computer demonstrations)	
PREREQUISITE COURSES:		Indicative prerequisite: Statistics I, Introduction to Information Systems & Applications	
TEACHING AND ASSESSMENT LANGUAGE:		Greek	
THE COURSE IS OFFERED TO ERASMUS STUDENTS		Yes (in English)	
COURSE WEBPAGE (URL)		<a href="https://www.econ.upatras.gr/el/undergraduate/courses/statistics2">https://www.econ.upatras.gr/el/undergraduate/courses/statistics2</a> <a href="https://eclass.upatras.gr/courses/ECON1282/">https://eclass.upatras.gr/courses/ECON1282/</a> <a href="https://eclass.upatras.gr/courses/ECON1364/">https://eclass.upatras.gr/courses/ECON1364/</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.*

By the end of this course the student will be able to:

- Have basic knowledge of theoretical probability distributions which constitute an essential methodological tool.
- Understand and be able to apply essential statistical inference. This implies that students should develop critical thinking on decision making.
- Understand and apply basic regression analysis to decision making
- Apply basic statistical techniques using statistical software and interpret the results

### General Competences

*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?*

By the end of this course the student will have developed the following skills:

- Ability to exhibit knowledge and understanding of the essential facts, concepts, theories and applications which are related to statistical inference and regression analysis.
- Ability to adopt and apply methodology for solving problems in the fields of statistical inference and regression analysis.
- Ability to use computational techniques in the aforementioned fields.
- Ability to interact with experts in statistics.

More generally, by the end of this course, the student will have developed the following abilities:

- Searching, analysing and synthesising facts and information using the necessary technologies
- Adapt to new situations
- Decision making
- Autonomous (Independent) work
- Promotion of free, creative and inductive thinking
- Work design and management



### 3. COURSE CONTENT

- **Theory:**

Large sample statistical inference. Sampling distributions. Means, difference between two means, proportions, difference between two proportions. Confidence intervals. Statistical testing. Small sample statistical inference. Student's t probability distribution. Means, difference between two means, paired difference test, proportions, difference between two proportions. Inferences about a population variance. The  $\chi^2$  probability distribution. Comparing two population variances. The F probability distribution. Introduction to simple and multiple regressions. The method of least-squares. Testing the utility of a model. Model building. Elements of time-series analysis.

- **Statistics with computers**

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>– Use of e-class to support teaching, laboratory work and communication with students</li> <li>– Use of SPSS statistical software</li> </ul>	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures (4 hours per week x 13 weeks)	52 hours
	Laboratory work (1 conduct hour per week x 13 weeks) – presentation of statistical packages and applications	13 hours
	Tutorials (1 hour per week x 13 weeks) - solving of representative problems	13 hours
	Hours for private study and preparation for the Laboratory (study of techniques and theory)	122
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>200 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<p>The overall course grade is the sum of</p> <p>a) final exam grade, consisting examination in Theory (60%) and in Statistics with computer (40%), plus</p> <p>b) 20 percent of the mid-term exam grade</p>	

### 5. ATTACHED BIBLIOGRAPHY

- *Suggested bibliography:*

- *in Greek:*

Keller, G. 2010. Statistics for economics and business administration. Epikentro publications, Thessaloniki.

Aczel, D. A. & Sounderpandian, J. 2016. Statistical thinking in the business world. P. C. Paschalidis Medical publications, Athens.

Chalkos, E. G. 2000. Statistics- theory, applications and use of programs on computers. Στατιστική-θεωρία εφαρμογές και χρήση προγραμμάτων σε Η/Υ. Typothito publications, Athens.

- *In English*

SPSS Help System

Kanji, Gopal, 2006, 100 Statistical Tests, Sage Publications

Canavos, G. C. & Miller, D. M. 1993. Wadsworth Pub Co. An introduction to modern business statistics. ISBN: 9780534168421

Keller, G. 2014. Southwestern College Pub. Statistics for management and economics

## ECONOMIC HISTORY

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO_130	<b>SEMESTER OF STUDIES</b>	2 <sup>nd</sup>
<b>COURSE TITLE</b>	ECONOMIC HISTORY		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>		Field of Economics Science	
<b>PREREQUISITE COURSES:</b>		No	
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>		Greek	
<b>No</b>		No	
<b>COURSE WEBPAGE (URL)</b>		<a href="http://www.econ.upatras.gr/el/undergraduate/courses/oikonomiki-istoria">http://www.econ.upatras.gr/el/undergraduate/courses/oikonomiki-istoria</a>	

#### 2. LEARNING OUTCOMES

<b>Learning outcomes</b> <i>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.</i>
<p>The aim of the course is to introduce students to the concepts of Economic History. After successful completion of the course, students are expected to:</p> <ul style="list-style-type: none"> <li>• Have the ability to evaluate and compare the various theoretical and empirical approaches to economic and social history</li> <li>• Understand and explain key processes of macroeconomic development: the transition from feudalism to capitalism and its various forms, the various phases of the industrial revolution, the occurrence of economic crises.</li> <li>• Be able to develop synthetic and analytical skills to analyze and compare patterns of development in the North, South and East and to distinguish forms and phases of globalization.</li> </ul>
<b>General Competences</b> <i>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?</i>
<ul style="list-style-type: none"> <li>• Search and compilation of information</li> <li>• Decision making</li> <li>• Working in an interdisciplinary environment</li> <li>• Promote free, creative and inductive thinking</li> </ul>

### 3. COURSE CONTENT

Introduction: Basic concepts, the content of Economic History. The middle ages. The transition from the middle ages to the commercial expansion of the 16th & 17th centuries. The discovery of the new lands & routes and their consequences. The rise of the capitalist system. The economic conditions during the 18th century. Technological progress & the industrial revolution. The revolution in transportation. Developments in the agricultural sector. Industrial production & the 2nd industrial revolution. Wars & economic crises. Post-war economic developments. The modern capitalism. Major economic crises. Europe's integration process. Problems & prospects.

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of IT in teaching, and in communication with the students (e-class).	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	13X3 = 39 hours
	Reading	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	End of semester final written exam	

### 5. ATTACHED BIBLIOGRAPHY

- *Suggested bibliography:*

- *In Greek:*

B. Κρεμμυδάς, Εισαγωγή στην Οικονομική Ιστορία της Ευρώπης (16ος-20ός αιώνας), εκδόσεις "Τυπωθήτω" - Γιώργος Δαρδανός, 2003.

Derek H. Aldcroft- Simon P. Ville (επιμέλεια), Η Ευρωπαϊκή Οικονομία 1750-1914, εκδόσεις Αλεξάνδρεια 2005

Derek H. Aldcroft, Η Ευρωπαϊκή Οικονομία 1914-2000, εκδόσεις Αλεξάνδρεια 2007.

- *Scientific Journals:*

The Economic History Review, The Journal of Economic History

## SECOND YEAR, 3<sup>rd</sup> Semester (Fall)

### MICROECONOMICS I

#### COURSE OUTLINE

##### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 201N	<b>SEMESTER OF STUDIES</b>	3rd
<b>COURSE TITLE</b>	MICROECONOMICS I		
<b>INDEPENDENT TEACHING ACTIVITIES</b>	<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>	
Lectures and tutorials	4(lect.),2(tut.)	8	

<b>COURSE TYPE</b>	Background course, Skills Development.		
<b>PREREQUISITE COURSES:</b>	Suggested prerequisite: Principle of Economics I		
<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/ECON1307/">https://eclass.upatras.gr/courses/ECON1307/</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.*

Microeconomics constitutes a basic pillar of Economics and therefore, a core course in the Department's program of studies. Microeconomics provides the theoretical background of the economic behavior of economic units, i.e., consumers, business firms and resource owners. The course is taught in two semesters as Microeconomics I and II. After the successful completion of Microeconomics I, students will be able to:

- Analyze and present in a scientific way the economic behavior and the economic decisions made by consumers and firms.
- Present and explain the optimizing economic decisions made by consumers (utility maximization) and firms (profit maximization).
- Present the workings of perfectly competitive markets as well as the process of determining equilibrium prices and quantities.
- Apply the theoretical economic models of the decision making processes and predict changes in the equilibrium positions of consumers and business firms.
- Analyze and present to special and non-special audiences the effects of governmental interventions in the markets for goods and services on the welfare of consumers and producers (consumer and producer surplus, deadweight losses).

### General Competences

*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?*

- Autonomous work
- Team work
- Decision making
- Promotion of free, creational and deductive reasoning

## 3. COURSE CONTENT

The nature of microeconomics. Demand and supply. Theory of consumer preferences and utility. Consumer behavior and individual demand curves. Market demand, price and income elasticities. The Slutsky equation. Revealed preferences and price indices. Time allocation and labour supply. The problem of intertemporal allocation. Risk and uncertainty. Production theory: technology and the factors of production, isoquants, elasticity of substitution, the short-and the long run, returns to scale. Theory of cost: optimal input combinations, estimation of short-run and long-run cost functions, Shepard's lemma. Theory of the firm in perfect competition in the short & in the long run. Supply curve. Consumer and producer surplus. Government intervention: taxes, subsidies, production restrictions, tariffs, import quotas.

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face-to-face class lectures
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	ICT technologies are employed for teaching, laboratory work and communication with students. Power point presentations, homework assignments, past exams are uploaded in the e-class platform.

TEACHING ORGANIZATION	Activity	Semester workload
	Lectures (4 hours per week x 13 weeks)	52 hours
	Tutorials (2 hours per week x 13 weeks)	26 hours
	Hours of private study	122 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>200 hours (total student work-load)</b>
<b>STUDENT ASSESSEMNT</b>	<p>The overall course grade is the sum of a) the final exam grade plus b) 20 percent of an optional mid-term exam grade*</p> <p>Both, the mid-term exams and the final are multiple- choice exams (40 questions with 5 alternative answers).All the information regarding course material, student assessment, laboratory exercises are included in the course outline, which is distributed to all students in the first day of classes. This material is also included in course webpage and it's always available to the students during their studies.</p> <p>** The above student evaluation method is a pilot one and will be re-examined at the end of academic year 2018-2019</p>	

## 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

H. Varian, Intermediate Economics, Norton,7/e, 2005

Nicholson/Snyder, Theory and Application of Intermediate Microeconomics, 10th ed, Thomson,2007

R. Pindyck -B. Rubinfeld, Microeconomics 6/e, PrenticeHall, 2004

C.McConnell-S.Brue, Microeconomics, 7/e, McGrawhill, 2005

D. Besanko, R. Braentigam, Microeconomics, 2/e, JohnWiley,2005

M. Katz & H. Rosen, Microeconomics, McGrawHill, 1998

Also, The Top 20 Articles AER.prf are included in the recommended literature

## MACROECONOMICS I

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 203N	<b>SEMESTER OF STUDIES</b>	3 <sup>rd</sup>
<b>COURSE TITLE</b>	MACROECONOMICS I		
<b>INDEPENDENT TEACHING ACTIVITIES</b>	<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>	
Lectures & Tutorials	4(lect.), 2(tut.)	8	

<b>COURSE TYPE</b>	Basic Economics Science
<b>PREREQUISITE COURSES:</b>	Suggested prerequisite: Principles of Economics II
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>	Greek
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>	No
<b>COURSE WEBPAGE (URL)</b>	<a href="http://www.econ.upatras.gr/en/undergraduate/courses/macroeconomics-i">http://www.econ.upatras.gr/en/undergraduate/courses/macroeconomics-i</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.*

The course introduces students to key topics of macroeconomic theory and policy. After successful completion of the course, students are expected to:

- Have the ability to recognize a country's main macroeconomic problems
- Understand the way an economy operates at the macro-level in the short- and medium term
- Understand the effects of economic policy on output, employment and the price level
- Understand the process of adjustment of the economy to exogenous shocks
- Are able to use functional relationships, diagrams, and the findings of empirical research to suggest ways to address/resolve macroeconomic problems
- Are able to solve exercises, finding values for the key macroeconomic variables and calculating how they may change following external shocks or economic-policy changes

### General Competences

*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 and compilation of data and information using the necessary technology
- Adapt to new situations
- Autonomous work, team work
- Decision making
- Working in an international environment
- Promote free, creative and inductive thinking

## 3. COURSE CONTENT

Macroeconomic objectives, macroeconomic models. Short-run equilibrium in the goods market. Equilibrium in the money market. The IS-LM model, multipliers. Effectiveness of fiscal & monetary policy, short-run effects of exogenous shocks. The aggregate demand function. Adjustment of the price level. The labour market, wages & employment. Imperfections in the labour market (mismatch, tax distortions, unions, efficiency wages, labour contracts). General equilibrium, the AD-AS model. Determination of output, employment and the price level. Dynamic adjustment to exogenous shocks and to economic-policy changes. Cases of malfunctioning of the adjustment mechanism (liquidity trap, inelastic investment demand, nominal/real interest rates). The Okun relationship. Expectations, the Phillips curve. Risk premiums in money & capital markets, the extended IS-LM model. Liquidity trap, QE. Oil prices, output & employment.

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face lectures and tutorials
<b>USE OF INFORMATION AND</b>	Use of IT in teaching, and in communication with the students



<b>COMMUNICATIONS TECHNOLOGY</b>	(e-class)	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures, 4hours per week	13X4 = 52 hours
	Tutorials, 2hours per week	13X2 = 26 hours
	Reading	122 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>200 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<p>The overall course grade is the sum of: a) the final exam grade plus b) 20 percent of a mid-term (optional) exam grade.*</p> <p>The curriculum, the exercises covered in the tutorials, samples of analytical questions, the assessment method of the course and other relevant material are available on the e-class platform and are accessible to all students.</p> <p>*The above student-evaluation method is a pilot one and will be re-examined at the end of the academic year 2018-2019.</p>	

## 5. ATTACHED BIBLIOGRAPHY

- <i>Suggested bibliography:</i> M.Gartner, Macroeconomics, Pearson, 2016  O. Blanchard, F. Giavazzi & A. Amighini, Macroeconomics: A European Perspective, Pearson, 2017  D. Acemoglu, D. Laibson & J. List, Macroeconomics, Pearson, 2015  S. Williamson, Macroeconomics, Global Edition, 2018  N.G. Mankiw, Macroeconomics, Worth Publisher, 2010  - <i>Related Journals:</i> European Economic Review, Economic Policy, Journal of Macroeconomics - <i>Useful internet sites:</i> <a href="http://www.economicsnetwork.ac.uk/teaching/text/intermediatemacroeconomics.htm">www.economicsnetwork.ac.uk/teaching/text/intermediatemacroeconomics.htm</a> <a href="http://www.economist.com">www.economist.com</a> <a href="http://www.oecd.org">www.oecd.org</a> <a href="http://rfe.org">http://rfe.org</a> <a href="http://www.imf.org">www.imf.org</a> <a href="http://europa.eu/">http://europa.eu/</a> <a href="http://www.nber.org/releases/">http://www.nber.org/releases/</a> <a href="http://www.ecb.int/home/html/index.en.html">http://www.ecb.int/home/html/index.en.html</a> <a href="http://www.bankofgreece.gr/">www.bankofgreece.gr/</a>
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## ENGLISH FOR ECONOMISTS I

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	1E01N	<b>SEMESTER OF STUDIES</b>	3rd
<b>COURSE TITLE</b>	ENGLISH FOR ECONOMISTS I		
<b>INDEPENDENT TEACHING ACTIVITIES</b>	<b>TEACHING</b>	<b>ECTS CREDITS</b>	

		HOURS PER WEEK	
Lectures		3	2
<b>COURSE TYPE</b>	General Knowledge		
<b>PREREQUISITE COURSES:</b>	Suggested Prerequisite: English B1/B2		
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>	English		
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>	Yes		
<b>COURSE WEBPAGE (URL)</b>	<a href="https://eclass.upatras.gr/courses/ECON1261/">https://eclass.upatras.gr/courses/ECON1261/</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.*

The aim of this introductory course is to familiarize students with the English language used in the field of Economics. A series of authentic or adapted texts from **Economics** university textbooks, periodicals and web-pages are read and discussed in class for comprehension, vocabulary acquisition and development. Students learn to read and describe tables, charts and diagrams related to economics. Complex grammar and syntax found in the reading selections is explained and practiced. The selected texts are drawn mostly from **Microeconomics**.

By the end of this course the students will have:

- Improved their understanding of economics terminology, especially the language used in economics textbooks and journals.
- Learned how to comprehend and analyze authentic material (texts referring to their subject matter), with teaching focused on the development of language skills for the purposes of their field of study.

### General Competences

*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?*

- Cultivation of skills in the use of English for economics
- Developing production skills and understanding of written and spoken language
- Acquiring academic writing skills

## 3. COURSE CONTENT

The selected texts are drawn mostly from **Microeconomics**. Every lesson includes a variety of language exercises which help students acquire the vocabulary and the skills necessary in their field of study.

### Topics include:

- Observation and Theory in Economics - Definitions of Economics and Microeconomics
- Scarcity - Choice -Efficiency -Constraints and Costs
- The importance of Logic in Economics- Critical Thinking
- Positive and Normative Economics
- Facts Evidence and Data- The Language of Statistics- Abbreviations in Academic Writing
- Expressing Cause and Effect in economics academic writing
- Elements of an Economic System - Production-Factors of Production
- Graphing Data- Demand and Supply-Equilibrium-Shifts vs. Movements
- Graphs and Diagrams- The language for describing and interpreting Graphs
- Choice and Utility Theory - Expressing numbers in English
- Markets - Interrelated Markets - Flexible Labour Markets
- Monopoly and Oligopoly - Kinked Demand Curve
- Revision – Exam practice

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

<b>TEACHING METHOD</b>	Face to face lectures	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of IT in teaching, and in communication with the students (e-class). Support Learning through the e-class platform	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures and classroom exercises/activities.	13X3 = 39 hours
	Reading- Language and lexical exercises	11 hours
	<b>A.</b> Optional Graph assignment: Description, analysis and interpretation of a graph: 10% of the final grade. To be uploaded on the e-class module: assignments <b>B.</b> Optional on- line assignments for Listening comprehension of Microeconomic topics: 20% of the final grade. To be uploaded on the e-class module: assignments <b>C.</b> On line multiple choice quizzes through e-class module: links ( material required for the final examination)	
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>50 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	Assessment consists of: (a) written exam at the end of the semester consisting of: true/false statements, multiple choice questions, cloze passages, matching terms and definitions, text comprehension , and short answer/ essay questions . (70 % of the final grade)  (b) Optional Assignment A (10% of the final grade)  (c) Optional Assignment B (20% of the final grade)  The final grade for the course will be based 100% on the final exam if no optional assignments are submitted. The curriculum, the assessment method of the course and other relevant material are available in e-class and are accessible to all students.	

#### 5. ATTACHED BIBLIOGRAPHY

- in English:

E-class documents: <https://eclass.upatras.gr/courses/ECON1261/>

I. Χρυσοβιτισιώτη και Ι. Σταυρακοπούλου, Λεξικό: Αγγλοελληνικό και Ελληνοαγγλικό Εμπορικών Τραπεζικών και Χρηματοοικονομικών Όρων εκδ. Παπαζήση 6η έκδοση 2006

P.A. Samuelson and W.D. Nordhaus Economics McGraw-Hill. Boston 19th edition, 2010

K. Case , R.C. Fair and Oster Principles of Economics 9th ed. Prentice Hall N.J. 2008

-Συναφή επιστημονικά περιοδικά:

<https://www.elsevier.com/social-sciences/economics-and-finance/economics-and-finance-journals>

-Συναφείς ιστοσελίδες:  
[http://www.academia.edu/33624679/Economics\\_19th Ed. Paul Samuelson William Nordhaus.pdf](http://www.academia.edu/33624679/Economics_19th_Ed._Paul_Samuelson_William_Nordhaus.pdf)  
[http://www.eatdirtmudrun.com/k/k\\_e\\_case\\_s\\_r\\_c\\_fair\\_s\\_s\\_oster.pdf](http://www.eatdirtmudrun.com/k/k_e_case_s_r_c_fair_s_s_oster.pdf)  
<http://www.bbc.co.uk/worldservice/learningenglish/language/wordsinthenews/>  
<http://www.ft.com>  
<http://www.economist.com>  
<http://www.smarteconomist.com>  
<http://rfe.org>  
<http://ocw.mit.edu/courses/economics>

## ACCOUNTING I

### COURSE OUTLINE

#### 1. GENERAL

1. GENERAL			
SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	ECONOMICS		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECON 131	SEMESTER OF STUDIES	3 <sup>rd</sup>
COURSE TITLE	ACCOUNTING I		
INDEPENDENTTEACHINGACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures		3	6
COURSE TYPE	Skills development		
PREREQUISITE COURSES:	No		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBPAGE (URL)	<a href="https://www.econ.upatras.gr/en/undergraduate/courses/accounting-i">https://www.econ.upatras.gr/en/undergraduate/courses/accounting-i</a>		

#### 2. LEARNING OUTCOMES

<p><b>Learning outcomes</b>  <i>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.</i></p> <p>Students will obtain the basic knowledge of accounting concepts and principles which allow them to handle issues related to financial accounting, such as measuring business transactions, financial reporting and analysis.  The course is introductory in nature and choice and therefore has no prerequisites.</p> <p><u>Competences:</u></p> <ul style="list-style-type: none"> <li>• Knowledge of basic accounting concepts and terms such as basic accounting equation, accounting event, balance sheet, income statement, cash flows statement etc.</li> </ul>
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- Understand how the double entry system works
- Monitoring of the accounting cycle of a firm and preparing basic financial statements i.e balance sheet, income statement etc.

### General Competences

*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?*

By the end of this course students will have developed the following skills (general abilities):

- *Search, analyze and synthesize data and information, using the necessary technologies*
- *Adapt to new situations*
- *Decision making*
- *Autonomous (Independent) work*
- *Working in an international environment*

### 3. COURSE CONTENT

- Weeks 1,2 : Introduction to the financial Statements
- Weeks 3,4 : Transaction Analysis
- Weeks 5,6: Accrual Accounting and Income
- Weeks 7,8: Inventory and Cost of Goods Sold
- Weeks 9,10: Plant Assets, Natural Resources & Intangibles
- Week 11: Internal Control and Cash
- Weeks 12,13: Case studies presentation and Problem solving.

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face-to-face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of Information and Communication Technologies (ICTs) (e.g. power point) in teaching and communicating with students.	
<b>TEACHING ORGANIZATION</b>	<b>Δραστηριότητα</b>	<b>Φόρτος Εργασίας Εξαμήνου</b>
	Lectures	39 hours
	Study and Analysis of the literature	72 hours
	Project writing	39 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	a) Submission of assignments (20%) and b) performance on the final written examination at the end of the semester (80%). The evaluation criteria are clearly defined and posted in the relevant web page of the course: <a href="http://eclass.upatras.gr/courses/ECON1230">http://eclass.upatras.gr/courses/ECON1230</a>	

### 5. ATTACHED BIBLIOGRAPHY

*-Recommended Literature :*

“Financial Accounting”, HARRISON - HORNGREN - THOMAS, PEARSON, 2015.

“Principles of Accounting”, Needles, Powers and Crosson, Cengage Learning, 2014.

Additional reading material is accessible at:

Lecture notes (<https://eclass.upatras.gr/modules/document/?course=ECON1209>).

*-Relevant Academic Journals:*

The Accounting Review, Journal of Accounting and Economics, Journal of Accounting Research, Contemporary Accounting Research, Review of Accounting Studies, Accounting, Organizations and Society, Management Accounting Research, Accounting, Auditing & Accountability Journal, Critical Perspectives on Accounting, Accounting Horizons.

*- Relevant Web links*

American Accounting Association (<http://aaahq.org>)  
British Accounting Association (<http://www.baa.group.shef.ac.uk/>)  
CFA Institute (<http://www.cfainstitute.org>)  
European Accounting Association (<http://www.eaa-online.org>)  
Business Week (<http://www.businessweek.com>)  
The Economist (<http://www.economist.com>)  
Eurostat (<http://epp.eurostat.ec.europa.eu/>)  
Financial Times (<http://www.ft.com>)  
Google Finance (<http://www.google.com/finance>)  
Reuters (<http://www.reuters.com>)  
Yahoo! Finance (<http://finance.yahoo.com/>)  
Committee of European Securities Regulators (CESR) (<http://www.cesr-eu.org>)  
European Union ([http://europa.eu/index\\_en.htm](http://europa.eu/index_en.htm))  
International Accounting Standards Board (IASB) (<http://www.iasb.org>)

## INTRODUCTION TO THE GREEK ECONOMY

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 154	<b>SEMESTER OF STUDIES</b>	3rd
<b>COURSE TITLE</b>	INTRODUCTION TO THE GREEK ECONOMY		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>	Field of Economics Science		
<b>PREREQUISITE COURSES:</b>	Suggested Prerequisites: Principles of Economics I		
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>	Greek		
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>	No		
<b>COURSE WEBPAGE (URL)</b>	<a href="http://application.econ.upatras.gr/melhdep/patronis">http://application.econ.upatras.gr/melhdep/patronis</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.*

After successful completion of the course, students are expected to:

- Have knowledge of the peculiarities of the Greek economy compared to the corresponding



<p>European ones</p> <ul style="list-style-type: none"> <li>• Are familiar with the course of macroeconomic aggregates and the overall evolution of the Greek economy over the period 1992-2015</li> <li>• Have the opportunity to evaluate the "growth" model of the Greek economy that has led to the financial crisis</li> </ul>
<p><b>General Competences</b></p> <p><i>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?</i></p>
<ul style="list-style-type: none"> <li>• Search and compilation of information</li> <li>• Decision making</li> <li>• Working in an international environment</li> <li>• Working in an interdisciplinary environment</li> <li>• Promote free, creative and inductive thinking</li> </ul>

### 3. COURSE CONTENT

Key Macroeconomic variables of the Greek Economy. Methods of measurement and time course. The evolution of the Greek economy - From the rapid industrialization of 1953-1973 in the stagnation period 1973-1992 - Critical 15 years 1993-2008: From the Convergence Program 1994-2000 to the Eurozone - The international crisis as a catalyst for national developments - Chronicle of the Greek economy 2010-2016 - Assessing the impact of the crisis on the key figures of the Greek economy - Interpretations of the Greek crisis.

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

17. TEACHING AND LEARNING METHODS – ASSESSMENT		
TEACHING METHOD	Face to face	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of IT in teaching, and in communication with the students (e-class).	
TEACHING ORGANIZATION	Activity	Semester workload
	Lectures	13X3 = 39 hours
	Reading	111 hours
	Total number of hours for the Course (25 hours of work-load per ECTS credit)	150 hours (total student work-load)
STUDENT ASSESSEMENT	End of semester final written exam	

### 5. ATTACHED BIBLIOGRAPHY

<p>- <i>Suggested bibliography:</i></p> <p>- <i>In Greek:</i></p> <p>Χ. Κόλλιας-Χ.Ναζάκης-Μ. Χλετσος (επιμέλεια), Σύγχρονες Προσεγγίσεις της Ελληνικής Οικονομίας, εκδόσεις Πατάκη, 2006</p> <p>Γ. Αργείτης (επιμέλεια), Οικονομικές Αλλαγές και Κοινωνικές Αντιθέσεις στην Ελλάδα, εκδόσεις "Τυπωθήτω" - Γιώργος Δαρδανός, 2005</p> <p>Δ. Χιόνης-Γ. Κορρές, Ελληνική Οικονομία, εκδόσεις Σταμούλη, 2003</p> <p>- <i>Scientific Journals:</i></p> <p>European Economic Review, The Journal of European Economy</p>
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## INTRODUCTION TO MARKETING-MANAGEMENT

### COURSE OUTLINE

## 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 220	<b>SEMESTER OF STUDIES</b>	3 <sup>rd</sup>
<b>COURSE TITLE</b>	INTRODUCTION TO MARKETING-MANAGEMENT		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>	Field of Science, Skills Development		
<b>PREREQUISITE COURSES:</b>	Suggested Prerequisites: Principles of Economics I		
<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://www.econ.upatras.gr/el/undergraduate/courses/eisagogi-sto-marketingk-manatzment">https://www.econ.upatras.gr/el/undergraduate/courses/eisagogi-sto-marketingk-manatzment</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.*

By the end of this course the student will be able to:

- Understand the basic concepts of marketing and their importance in the modern business/economic environment
- Understand the competitive business environment
- Use the appropriate information from market research in order to design effective and efficiency marketing strategies
- Explain consumers' decision-making process
- Understand the importance of Business Policies and Strategic Marketing tools in the marketplace.
- Cooperate with their fellow students in assessing and presenting a real business case study.

### General Competences

*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?*

By the end of this course the student will have developed the following general abilities:

- Work design and management
- Decision making
- Group work

## 3. COURSE CONTENT

Introduction to the concepts of management and business strategy. The role of marketing management in the performance of businesses and organizations. Satisfying the customer. Winning markets through market-oriented strategic planning. The management of marketing information and the measurement of market demand. Analysis of marketing environment. Analysis of consumer- and industrial-buying behavior. Sectors and competitors. Market segmentation and targeting markets. Product/offer differentiation. Product/offer positioning. New product/offer development. Global marketing strategies. Planning, implementation, evaluation, and control of the marketing effort.

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Lectures	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of IT in teaching, and in communication with students (e.g. PowerPoint presentations, e-class, web-sites).	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures 3 hours per week	13X3 = 39 hours
	Work at home	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	Written final examination	

## 5. ATTACHED BIBLIOGRAPHY

### - Suggested bibliography:

Perreault, W. D., Cannon, J. P. and McCarthy, E. J. (2012) Βασικές Αρχές Μάρκετινγκ: Μια Στρατηγική Προσέγγιση. Αθήνα: Εκδόσεις Πασχαλίδης.

Armstrong Gary, Kotler Philip. (2009). Εισαγωγή στο Marketing, Εκδόσεις Επίκεντρο

ΠΑΝΤΟΥΒΑΚΗΣ Α.-ΣΙΩΜΚΟΣ Γ.-ΧΡΗΣΤΟΥ Ε. (2015). ΜΑΡΚΕΤΙΝΓΚ, Εκδοτικός Οργανισμός Λιβάνη ABE

### -Πρόσθετη βιβλιογραφία (ενδεικτική)

Σιώμκος, Γ. Ι. (2013), Στρατηγικό Μάρκετινγκ, Εκδόσεις Σταμούλης, Αθήνα.

Kotler, P. και Keller, K.L. (2006), Μάρκετινγκ Μάνατζμεντ, Εκδόσεις Κλειδάριθμος, Αθήνα.

Παπαδάκης, Β. (2012), Στρατηγική των Επιχειρήσεων, τ. Α και Β, Εκδόσεις Μπένου, Αθήνα.

### -Συναφή επιστημονικά περιοδικά:

European Journal of Marketing, Journal of Marketing Management, Journal of Strategic Marketing

## BUSINESS ADMINISTRATION I

### COURSE OUTLINE

#### 1. GENERAL

1. GENERAL			
SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	BUSINESS ADMINISTRATION		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECO_DE113	SEMESTER OF STUDIES	3 <sup>rd</sup>
COURSE TITLE	BUSINESS ADMINISTRATION I		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures and case studies		3	6
COURSE TYPE	Field of Science		
PREREQUISITE COURSES:	There are no prerequisite courses.		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBPAGE (URL)	<a href="https://eclass.upatras.gr/courses/BMA471/">https://eclass.upatras.gr/courses/BMA471/</a>		

## 2. LEARNING OUTCOMES

### Learning outcomes

The aim of the course is to introduce students in Management Science giving emphasis on planning, organizing, leading and controlling, as well as on managerial roles and managers' competences. Moreover, relevant theories and key concepts will be analyzed with critical perspective in today's turbulent business environment.

At the end of this course the student should be able to:

1. Understand the basic concepts and theories related to Business Administration.
2. Develop critical thinking regarding managerial functions in today's business.

### General Abilities

At the end of the course the student will have further developed the following skills/competences:

1. Analyzing theoretical concepts and investigating relevant managerial practices.
2. Generating ideas for case studies regarding managerial effectiveness.

## 3. COURSE CONTENT

1. Introduction to Management
2. Planning
3. Organizing
4. Leading
5. Controlling

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD.</b>	Lectures	
<b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES</b>	The lectures content of the course for each chapter are uploaded on the internet (e-class), in the form of a series of ppt files, where from the students can freely download them using a password which is provided to them at the beginning of the course.	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	42
	Case studies	26
	Hours for private study of the student	82
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours</b>
<b>STUDENT ASSESSEMENT</b>	The grade is calculated on the basis of the final written exam (theory, case studies).	

## 5. RECOMMENDED LITERATURE

Schermerhorn J. (2012). *Management*, John Wiley & Sons.

Mullins L. and Christy G. (2014). *Management and Organizational Behavior*, Pearson Education Limited.

## SECOND YEAR, 4<sup>th</sup> Semester (Spring)

### MICROECONOMICS II

#### COURSE OUTLINE

##### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 202N	<b>SEMESTER OF STUDIES</b>	4th
<b>COURSE TITLE</b>	MICROECONOMICS II		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures and Tutorials		4(lect.),2(tut.)	8
<b>COURSE TYPE</b>	Background course and Skills Development.		
<b>PREREQUISITE COURSES:</b>	Suggested prerequisites: Principal of Economics I and Microeconomics I.		
<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/ECON1307/">https://eclass.upatras.gr/courses/ECON1307/</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.*

Microeconomics constitutes one of the two basic pillar of Economics (the other being Macroeconomics) and thus it is a core course in any undergraduate program of Economics. Microeconomics provides the theoretical foundation of the economic behavior of economic units, i.e., consumers, business firms, and resource owners. Microeconomics is taught in two semesters as Microeconomics I and II. After the successful completion of Microeconomics II students will be able to:

- Analyze and present in a professional and scientific way, to specialized and non- specialized audiences, the various market structures and their economic effects on equilibrium prices and quantities in the short run and long run.
- Analyze the business strategies undertaken by firms when there is interdependence among them.
- Analyze and present in a scientific way the markets for factors of production and apply comparative static analysis.
- Demonstrate knowledge and understanding of the issues concerning efficiency, general equilibrium and general welfare.
- Analyze the effects of government intervention in the case of public goods and externalities and explain why governmental intervention improves general welfare.
- Apply microeconomic theory and microeconomic models to real economic situations and

explain, analyze and predict the effects of interventions and structural changes in the economy on the welfare of individuals.

### General Competences

*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?*

- Autonomous work
- Team work
- Decision making
- Promotion of free, creational and deductive reasoning

### 3. COURSE CONTENT

Pure monopoly theory: short-run and long-run equilibrium, comparison with perfect competition, price differentiation. The theory of monopolistic competition: product differentiation, short -run and long-run equilibrium, advertising. Oligopoly theory: background, the Cournot and Bertrand models, Stackelberg model, model of dominant firm, the Sweezy model, cartels. Introduction to Game theory. Price and employment of inputs under perfect competition. Price and employment of inputs under imperfect competition. General equilibrium and resource allocation. Edgeworth box, exchange and production. The product transformation curve, the marginal rate of transformation. Welfare economics and political economy. Marginal conditions for optimal resource allocation, the production possibility curve and the social welfare function, perfect competition and economic efficiency. Public goods, externalities. The optimal quantity of a public good, the provision of a public good, the case of environmental pollution, property rights and the Coase theorem, state intervention. Moral hazard, asymmetric information, auctions.

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face- to -face lectures in the classroom	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	In e-class material, in tutorials, when necessary and in student's communication	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures (4 hours per week x 13 weeks)	52 hours
	tutorials (2 hours per week x 13 weeks)	26 hours
	Hours for private study of the student	122 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>200 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<p>The overall course grade is the sum of a) the final exam grade plus b) 20 percent of an optional mid-term exam grade* Both, the mid-term exams and the final are multiple- choice exams (40 questions with 5 alternative answers). All the information regarding course material, student assessment, laboratory exercises are included in the course outline, which is distributed to all students in the first day of classes. This material is also included in course webpage and it's always available to the students during their studies.</p> <p>* The above student evaluation method is a pilot one and will be re-examined at the end of academic year 2018-2019</p>	

### 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

H. Varian, Intermediate Economics, Norton, 7/e, 2005

Nicholson/Snyder, Theory and Application of Intermediate Microeconomics, 10th ed,

Thomson, 2007

R. Pindyck -B. Rubinfeld, Microeconomics 6/e, PrenticeHall, 2004

C.McConnell-S.Brue, Microeconomics, 7/e, McGrawhill, 2005

D. Besanko, R. Braentigam, Microeconomics, 2/e, JohnWiley, 2005

M. Katz & H. Rosen, Microeconomics, McGrawHill, 1998

The Top 20 Articles AER.prf

## MACROECONOMICS II

### COURSE OUTLINE

#### 1. GENERAL

1. GENERAL			
SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	ECONOMICS		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECO 204N	SEMESTER OF STUDIES	4 <sup>th</sup>
COURSE TITLE	MACROECONOMICS II		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures & tutorials		4(lect.), 2(tut.)	8
COURSE TYPE	Basic Economics Science		
PREREQUISITE COURSES:	Suggested prerequisites: Macroeconomics I		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	Yes (in English)		
COURSE WEBPAGE (URL)	<a href="http://www.econ.upatras.gr/en/undergraduate/courses/macroeconomics-ii">http://www.econ.upatras.gr/en/undergraduate/courses/macroeconomics-ii</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.*

This course is a continuation of Macroeconomics I, and it aims to examine important issues of macroeconomic theory and policy. After successful completion of the course, students are expected to:

- Understand how an open economy operates and how it may react to policy changes and exogenous shocks
- Understand the factors that generate growth
- Understand the factors that can lead to changes in aggregate consumption and investment
- Understand the dynamics of fiscal deficits, why a country may accumulate public debt, when the debt is unsustainable and what this may imply for the government-bond markets



- Are able to use functional relationships, diagrams, and the findings of empirical research to suggest ways to address/resolve key macroeconomic problems
- Are able to solve exercises, identifying equilibrium values for macroeconomic variables and calculating how they may change when external events or changes in economic policy occur

### General Competences

*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 and compilation of data and information using the necessary technology
- Adapt to new situations
- Autonomous work, team work
- Decision making
- Working in an international environment
- Promote free, creative and inductive thinking

## 3. COURSE CONTENT

Open Economy: National income constraint, balance of payments, trade balance. Determinants of net exports. Interest rates, exchange rates, determinants of international capital flows. Equilibrium in the open economy. Analysis of effects of policy changes and external shocks. Role of the exchange rate system and the degree of international capital mobility. Growth: Growth accounting, Solow residual. Savings & productivity in the Solow model, dynamic adjustment and steady-state equilibrium. 'Golden rule' of capital accumulation. The extended Solow model. Technology, human capital, the public sector, globalization, poverty traps. Absolute & relative convergence of per capita incomes. Endogenous growth, the AK model. Consumption & Investment: Consumption and intertemporal choice. The life-cycle model, the permanent income model. Investment demand, expectations & uncertainty. Present-value model, accelerator model, neoclassical investment model, Tobin's-Q model. Fiscal Policy, Deficits & Public Debt: The income constraint of the state, ways of financing public spending. Reasons for accumulating deficits, the dynamics of deficits, sustainable and unsustainable public debt. Monetization of public debt. The market for government bonds, risk premiums, speculation, rating.

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face lectures and tutorials	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of IT in teaching, and in communication with the students (e-class).	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures, 4 hours per week	13X4 = 52 hours
	Tutorials, 2 hours per week	13X2 = 26 hours
	Reading	122 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>200 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<p>The overall course grade is the sum of: a) the final exam grade plus b) 20 percent of a mid-term (optional) exam grade.*</p> <p>The curriculum, the exercises covered in the tutorials, samples of analytical questions, the assessment method of the course and other relevant material are available on the e-class platform and are accessible to all students.</p> <p>*The above student-evaluation method is a pilot one and will be re-examined at the end of the academic year 2018-2019.</p>	

## 5. ATTACHED BIBLIOGRAPHY

- *Suggested bibliography*:  
M.Gartner, Macroeconomics, Pearson, 2016

R. Barro, Macroeconomics, 5 <sup>th</sup> Edition, 2012
O. Blanchard, F. Giavazzi & A. Amighini, Macroeconomics: A European Perspective, Pearson, 2017
D. Acemoglu, D. Laibson & J. List, Macroeconomics, Pearson, 2015
M. Gartner, Macroeconomics, Pearson, 2016
- <i>Related Journals:</i> European Economic Review, Economic Policy, Journal of Macroeconomics
- <i>Useful internet sites:</i> <a href="http://www.economicsnetwork.ac.uk/teaching/text/intermediatemacroeconomics.htm">www.economicsnetwork.ac.uk/teaching/text/intermediatemacroeconomics.htm</a> <a href="http://www.economist.com">www.economist.com</a> <a href="http://www.oecd.org">www.oecd.org</a> <a href="http://rfe.org">http://rfe.org</a> <a href="http://www.imf.org">www.imf.org</a> <a href="http://europa.eu/">http://europa.eu/</a> <a href="http://www.nber.org/releases/">http://www.nber.org/releases/</a> <a href="http://www.ecb.int/home/html/index.en">http://www.ecb.int/home/html/index.en</a> <a href="http://www.bankofgreece.gr/">www.bankofgreece.gr/</a>

## ENGLISH FOR ECONOMISTS II

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	1E02	<b>SEMESTER OF STUDIES</b>	4 <sup>th</sup>
<b>COURSE TITLE</b>	ENGLISH FOR ECONOMISTS II		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	2
<b>COURSE TYPE</b>	General Knowledge		
<b>PREREQUISITE COURSES:</b>	Suggested prerequisite: English for Economists I		
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>	English		
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>	Yes		
<b>COURSE WEBPAGE (URL)</b>	<a href="https://eclass.upatras.gr/courses/ECON1268/">https://eclass.upatras.gr/courses/ECON1268/</a>		

#### 2. LEARNING OUTCOMES

<b>Learning outcomes</b> <i>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.</i>
<p>The aim of the course is to further develop what was learnt in the <i>English-for-Economists I</i> course. Students will advance their English language comprehension in the field of Economics. They will analyze economics texts from <b>Economics</b> related university textbooks and they will learn the structure and language of research papers published in periodicals in the field of economics. Selected texts are mostly drawn from <b>Macroeconomics</b>.</p> <p>By the end of this course the students will be able to:</p> <ul style="list-style-type: none"> <li>• Understand economics terminology, especially the language used in economics textbooks and</li> </ul>

<p>journals.</p> <ul style="list-style-type: none"> <li>• Learn how to comprehend and analyze authentic material (texts referring to their subject matter) with teaching focused on the development of language skills for special purposes.</li> <li>• Read, understand, analyze the language and outline a published journal paper in the field of economics.</li> </ul>
<p><b>General Competences</b></p> <p><i>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?</i></p> <ul style="list-style-type: none"> <li>• Cultivation of skills in the use of English terminology and language for economics</li> <li>• Developing production skills and understanding of written and spoken language</li> <li>• Proper pronunciation and expression</li> <li>• Acquiring academic reading and writing skills</li> <li>• Working in an international environment</li> <li>• Working in an interdisciplinary environment</li> </ul>

### 3. COURSE CONTENT

<p>This course focuses on the language of economics at an advanced academic level. The selected texts are mostly drawn from macroeconomics. Every lesson includes a variety of language exercises which help students acquire the vocabulary and the skills necessary in their field of study.</p> <p><b>Topics include:</b></p> <ul style="list-style-type: none"> <li>• Macroeconomics – Terms and Definitions-Prosperity and Depression</li> <li>• The use of metaphor in the language of economics- Identifying and Understanding Metaphors in Economics textbooks and Journal articles</li> <li>• John Maynard Keynes - Objectives of Macroeconomics: Terms and definitions- The tools of macroeconomic policy</li> <li>• The national income and product accounts- Measuring economic activity- Final goods and services</li> <li>• Aggregate supply and demand – Referring to sources in academic writing</li> <li>• Consumption and investment-Business cycles</li> <li>• The Evolution of Money- Analysis of results in academic writing</li> <li>• International trade – Trade barriers</li> <li>• Banks and the supply of money-The International Monetary System</li> <li>• Reporting what others say- The basic structure of a report in economics</li> <li>• Writing economics: - The economic approach</li> <li>• The structure of published papers in economics</li> <li>• Reading, understanding and outlining a Journal paper</li> </ul>
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### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face lectures	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of IT in teaching, and in communication with the students (e-class). Support Learning through the e-class platform	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	13X3 = 39 hours
	<b>Hours for private studying</b> Studying language and lexical exercises	11 hours
	<b>A. (optional)</b> On line assignments for Listening comprehension of Macroeconomic topics through the e-class platform. 10% of final grade	
	<b>B. (Optional)</b> Reading and	

	understanding a published economics journal paper. Answering comprehension questions related to the structure, the language and the content of the paper through the e-class platform. 20% of final grade	
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>50 hours (total student work-load)</b>
<b>STUDENT ASSESMENT</b>	<p>Assessment consists of:</p> <p>(a) written exam at the end of the semester consisting of: true/false statements , multiple choice questions, cloze passages , matching terms and definitions, text comprehension , and short answer/ essay questions . (70 % of the final grade)</p> <p>(b) Optional Assignment A (10% of the final grade)</p> <p>(c) Optional Assignment B (20% of the final grade)</p> <p>The final grade for the course will be based 100% on the final exam if no optional assignments are submitted.</p> <p>The curriculum, the assessment method of the course and other relevant material are available in e-class and are accessible to all students.</p>	

## 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

-in English:

E-class Documents: <https://eclass.upatras.gr/courses/ECON1268/>

P.A. Samuelson and W.D. Nordhaus Economics McGraw-Hill. Boston 19th edition, 2010

K. Case , R.C. Fair and Oster Principles of Economics 9th ed. Prentice Hall N.J. 2008

Λεξικό Ελληνοαγγλικό Εμπορικών Τραπεζικών και Χρηματοοικονομικών Όρων εκδ. Παπαζήση 6η έκδοση 2006

-Related journals:

<https://www.elsevier.com/social-sciences/economics-and-finance/economics-and-finance-journals>

--Useful internet sites:

[http://www.academia.edu/33624679/Economics\\_19th\\_Ed.\\_Paul\\_Samuelson\\_William\\_Nordhaus.pdf](http://www.academia.edu/33624679/Economics_19th_Ed._Paul_Samuelson_William_Nordhaus.pdf)

[http://www.eatdirtmudrun.com/k/k\\_e\\_case\\_s\\_r\\_c\\_fair\\_s\\_s\\_oster.pdf](http://www.eatdirtmudrun.com/k/k_e_case_s_r_c_fair_s_s_oster.pdf)

<http://www.bbc.co.uk/worldservice/learningenglish/language/wordsinthenews/>

[www.ft.com](http://www.ft.com)

[www.economist.com](http://www.economist.com)

[www.smarteconomist.com](http://www.smarteconomist.com)

<http://rfe.org>

<http://ocw.mit.edu/courses/economics>

<http://www.csbsju.edu/academic-advising/study-skills-guide/lecture-note-taking>

## ACCOUNTING II

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS
<b>DEPARTMENT</b>	ECONOMICS
<b>LEVEL OF COURSE</b>	UNDERGRADUATE

COURSE CODE	ECON 132	SEMESTER OF STUDIES	FOURTH
COURSE TITLE	ACCOUNTING II		
INDEPENDENTTEACHINGACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures and tutorials		3(lect.), 2(tut.)	4 <sup>th</sup>
COURSE TYPE	Skills development		
PREREQUISITE COURSES:	Suggested prerequisites: Accounting I		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBPAGE (URL)	<a href="https://www.econ.upatras.gr/en/undergraduate/courses/accounting-ii">https://www.econ.upatras.gr/en/undergraduate/courses/accounting-ii</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.*

Students will acquire the relevant knowledge and skills for managing specialized issues in financial accounting and valuation. The approach of the various accounting issues is based primarily on the International Accounting Standards completed with references to practices consistent with Greek Accounting Standards.

### Competences:

- Theoretical knowledge of specific accounting issues
- Perception of the wiring of the accounts of assets and liabilities with those of the Income Statement and Cash Flow Statement
- Application of valuation methods to the most important assets of firms.

### General Competences

*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?*

By the end of this course the student will, furthermore, have developed the following skills (general abilities):

- *Search, analyze and synthesize data and information, using the necessary technologies*
- *Adapt to new situations*
- *Decision making*
- *Autonomous (Independent) work*
- *Working in an international environment*

## 3. COURSE CONTENT

- Weeks 1,2 : Accounting for Short-Term Investments & Receivables
- Weeks 3,4 : Accounting for Long-Term Investments & the Time Value of Money
- Weeks 5,6: Accounting for Liabilities
- Weeks 7,8: Accounting for Stockholders' Equity
- Weeks 9,10: Evaluating Performance
- Week 11: The Statement of Cash Flows
- Weeks 12,13: Case studies presentation and Problems solvinig.

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

<b>TEACHING METHOD</b>	Face-to-face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of Information and Communication Technologies (ICTs) (e.g. powerpoint) in teaching and communicating with students.	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures, 3hours per week	13X3=39 hours
	Tutorials, 2hours per week	13X2=26 hours
	Study and analysis of the literature	46 hours
	Project writing and problem sets solving	39 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	a) Submission of assignments (30%) and b) performance on the final written examination at the end of the semester (70%). The evaluation criteria are clearly defined and posted in the relevant web page of the course: <a href="https://eclass.upatras.gr/courses/ECON1211/">https://eclass.upatras.gr/courses/ECON1211/</a>	

#### 5. ATTACHED BIBLIOGRAPHY

##### *-Recommended Literature:*

"Financial Accounting", HARRISON - HORNGREN - THOMAS, PEARSON, 2015.

"Principles of Accounting", Needles, Powers and Crosson, Cengage Learning, 2014.

Additional reading material is accessible at:

Lecture notes (<https://eclass.upatras.gr/modules/document/?course=ECON1211>).

##### *-Relevant Academic Journals:*

The Accounting Review, Journal of Accounting and Economics, Journal of Accounting Research, Contemporary Accounting Research, Review of Accounting Studies, Accounting, Organizations and Society, Management Accounting Research, Accounting, Auditing & Accountability Journal, Critical Perspectives on Accounting, Accounting Horizons.

##### *- Relevant Web links*

American Accounting Association (<http://aaahq.org>)

British Accounting Association (<http://www.baa.group.shef.ac.uk/>)

CFA Institute (<http://www.cfainstitute.org>)

European Accounting Association (<http://www.eaa-online.org>)

Business Week (<http://www.businessweek.com>)

The Economist (<http://www.economist.com>)

Eurostat (<http://epp.eurostat.ec.europa.eu/>)

Financial Times (<http://www.ft.com>)

Google Finance (<http://www.google.com/finance>)

Reuters (<http://www.reuters.com>)

Yahoo! Finance (<http://finance.yahoo.com/>)

Committee of European Securities Regulators (CESR) (<http://www.cesr-eu.org>)

European Union ([http://europa.eu/index\\_en.htm](http://europa.eu/index_en.htm))

International Accounting Standards Board (IASB) (<http://www.iasb.org>)

## COMPUTER ASSISTED STATISTICS

### COURSE OUTLINE

## 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO_222	<b>SEMESTER OF STUDIES</b>	4 <sup>TH</sup>
<b>COURSE TITLE</b>	COMPUTER ASSISTED STATISTICS		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures and Laboratory work		4	6
<b>COURSE TYPE</b>	Specialised general knowledge, Skills development		
<b>PREREQUISITE COURSES:</b>	No		
<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/ECON1364/">https://eclass.upatras.gr/courses/ECON1364/</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.*

The aim of the course is to apply the basic statistical methods and techniques using the possibilities offered by the SPSS statistical software. The emphasis is on selecting the appropriate statistical method and on interpreting the results.

After completing the course, the student will be able to:

- manage statistical data and perform statistical analysis using SPSS
- decide on the most appropriate statistical method for describing and analyzing data
- check the assumptions and apply the statistical techniques
- choose and create the right statistical graph
- to interpret SPSS results

### General Competences

*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,
- Working independently,
- Team work,
- Production of free, creative and inductive thinking

## 3. COURSE CONTENT

- The Basics of SPSS
- Statistical data sources - Questionnaires- Coding – Detailed Statistical Tables – Data creation in SPSS and data cleaning
- Analyzing data sets using SPSS: Univariate Descriptive Statistics - Relationship between two variables - T-tests and Confidence Intervals - Chi square tests - Analysis of Variance
- Graphical Displays - Checking normality

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face Lectures and Laboratory work
<b>USE OF INFORMATION AND COMMUNICATIONS</b>	<ul style="list-style-type: none"> <li>• Use of e-class to support teaching, laboratory work and communication with students.</li> </ul>



<b>TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>Use of SPSS Statistical software.</li> </ul>	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures, 2 hours per week	13X2 = 26 hours
	Laboratory work, 2 hours per week	13X2 = 26 hours
	Self-study and homework exercises	98 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<b>Assessment:</b> (a) Written exam at the end of the semester (b) Homework exercises (it is optional and count for 20% of the final grade)	

## 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

-In Greek:

Keller, G. 2010, Στατιστική για οικονομικά και διοίκηση επιχειρήσεων, ΕΚΔΟΣΕΙΣ ΕΠΙΚΕΝΤΡΟ.

Γναρδέλλης, X., 2013, Ανάλυση δεδομένων με το IBM SPSS STATISTICS 21, ΕΚΔΟΣΕΙΣ ΠΑΠΑΖΗΣΗ

-Related Bibliography (in Greek)

Εγχειρίδια χρήσης του SPSS (Help - IBM SPSS Statistics)

Kanji, Gopal, 2006, 100 Statistical Tests, SAGE Publications

## ECONOMIC GEOGRAPHY

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 240	<b>SEMESTER OF STUDIES</b>	4 <sup>th</sup>
<b>COURSE TITLE</b>	ECONOMIC GEOGRAPHY		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>	Field of Science		
<b>PREREQUISITE COURSES:</b>	Suggested prerequisites: Introduction to Economics I & II		
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>	Greek		
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>			
<b>COURSE WEBPAGE (URL)</b>	<a href="http://www.econ.upatras.gr/el/undergraduate/courses/oikonomiki-geografia">http://www.econ.upatras.gr/el/undergraduate/courses/oikonomiki-geografia</a>		

## 2. LEARNING OUTCOMES

<b>Learning outcomes</b> <i>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.</i>
<p>By the end of the course it is expected that the students will have developed adequate knowledge of:</p> <ul style="list-style-type: none"> <li>• The cornerstones in the historical development of Economic Geography, its methodology and research orientations from 19th century to contemporary era, through the succession of different "Paradigms" or schools of thought.</li> <li>• The geographical dimensions of economic activities, the processes of industrialization and mass production (Fordism-Taylorism) in space, the theories of the location of industries and those of balanced and uneven spatial development.</li> <li>• The processes of crisis and restructuring of Fordism, the development of the post-Fordist regime of flexible accumulation and its spatial configurations, the development of business networks and clusters in spaces and localities, the geographical aspects of economic globalization, the geographies of service industries and the development of postindustrial and postmodern urban centres.</li> </ul>
<b>General Competences</b> <i>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?</i>
<ul style="list-style-type: none"> <li>• Team work</li> <li>• Respect to the natural (and built) environment</li> <li>• Promotion of free, creative and inductive thinking.</li> </ul>

## 3. COURSE CONTENT

<p>Epistemological turns and critical debates in the historic development of Economic Geography. The spatial dimensions of economic activities. Industrialization, mass production and spatial structures. Classical location theories. Theoretical approaches to balanced and uneven spatial development. The crisis of Fordism, de-industrialization and their spatial effects. Flexible accumulation, business networks/clusters, and neo-Marshallian industrial districts. Economic globalization through the prism of critical Economic Geography. The restructuring of capitalism and the development of postindustrial and postmodern cities.</p>
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## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>• Use of PowerPoint during lectures</li> <li>• Lecturing notes are uploaded in e-class in the form of pdf files, which the enrolled students can freely download and study</li> <li>• Bibliographical material (scientific articles and book chapters) in pdf files, is regularly uploaded in e-class, which the enrolled students can freely download and study</li> <li>• Other information and announcements concerning the course are regularly uploaded in e-class</li> <li>• Distant communication with students (when needed) takes place via e-mail</li> </ul>	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures (3 hours/week x 13 weeks)	39 hours
	Independent study (including the study necessary for the assignments)	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	The students' assessment is based upon: (1) written exams at	

	<p>the end of the semester (60% of the final course grade) and (2) group assignments/written essays that each student group must present and discuss in the class (40% of the final course grade)*. The above percentages may change depending on the level of difficulty of the assignments.</p> <p>[* In order for the assignment grade to “count” in the final course grade, the student should get at least the grade 5.0 in the final written exam].</p> <p>The evaluation criteria are presented orally during the introductory course lecture and are clearly defined in the “course guide” which is uploaded in e-class (and therefore easily assessible to the enrolled students). In the e-class the students can also find a “guide for successful work presentation” in which the relating guidelines and criteria are clearly defined.</p>
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## 5. ATTACHED BIBLIOGRAPHY

### *-Suggested bibliography*

Harvey, D. (2009) Η Κατάσταση της Μετανεωτερικότητας: Διερεύνηση των Απαρχών της Πολιτισμικής Μεταβολής. Αθήνα: Μεταίχμιο.

Κουρλιούρος Η. (2011) Διαδρομές στις Θεωρίες του Χώρου: Οικονομική Γεωγραφία της Παραγωγικής Αναδιάρθρωσης και της Άνισης Ανάπτυξης. Αθήνα: Προπομπός.

### *-Additional bibliography (indicative)*

Aoyama, Y., Murphy, J.T., & Hanson, S. (2012) Key concepts in Economic Geography. Los Angeles: Sage.

Clark G., Feldman M., Gertler M.S. Wojcik, D. eds., (2018) The New Oxford Handbook of Economic Geography. Oxford: Oxford University Press.

Harvey, D. (2015) Ενδέκατη αντίφαση: Άνιση γεωγραφική ανάπτυξη και η παραγωγή του χώρου. Στο βιβλίο του ίδιου: 17 αντιφάσεις και το τέλος του καπιταλισμού. Αθήνα: Μεταίχμιο.

Κουρλιούρος, Η. (2007) Οικονομική γεωγραφία: Επιστημολογικές τομές και κριτικές αντιπαραθέσεις. Στο: Τερκενλή Θ., Ιωσηφίδης, Θ., Χωριανόπουλος, Ι. (επιμ.), Ανθρωπογεωγραφία: Άνθρωπος, Κοινωνία και Χώρος. Αθήνα: Εκδόσεις Κριτική.

Λαμπριανίδης, Α. (2012) Οικονομική Γεωγραφία. Στοιχεία θεωρίας και εμπειρικά παραδείγματα. Αθήνα: εκδ. Πατάκη.

### *-Scientific journals (indicative)*

Antipode, Economic Geography, Journal of Economic Geography, Regional Studies

## ISSUES ON DIGITAL ECONOMY

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 241	<b>SEMESTER OF</b>	4 <sup>th</sup>

		STUDIES	
COURSE TITLE	ISSUES ON DIGITAL ECONOMY		
INDEPENDENT TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
Lectures (L) and Laboratory Exercises (LE)	5: 3 (L), 2 (LE)	6	
COURSE TYPE	Field of Economics Science, Skill Development		
PREREQUISITE COURSES:	Suggested Prerequisite: Introduction to Information Systems and Applications		
TEACHING AND ASSESSMENT LANGUAGE:	Greek, English		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	Yes (In English)		
COURSE WEBPAGE (URL)	<a href="http://www.econ.upatras.gr/el/undergraduate/courses/themata-psifiakis-oikonomias">http://www.econ.upatras.gr/el/undergraduate/courses/themata-psifiakis-oikonomias</a> <a href="https://eclass.upatras.gr/courses/ECON1315/">https://eclass.upatras.gr/courses/ECON1315/</a> (Open course)		

## 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.*

This course examines issues regarding how digital technologies influence, shape, chance economic activities. After successful completion of the course, students will be able to:

- Define the concept of Digital Economy and identify the characteristics of information goods
- Describe the basic architecture of computer networks, the Internet and the WWW and how these influence the economy.
- Explain the concept of e-commerce, identify the different models of e-commerce and describe the different business models for digital enterprises.
- Study and analyze use cases of e-businesses and identify the elements of the adopted business model
- Create a business plan of a digital enterprise using the Business Model Canvas.
- Define the basic theoretical underpinnings of cryptocurrencies and describe the architecture and function of cryptocurrencies like Bitcoin
- Identify the concept of Intellectual Property Rights (IPR) in the context of Information goods and explain the notions of "openness" like open knowledge, open source, open data, Creative Common licenses
- Create websites to support e-commerce using contemporary Web technologies Web (HTML, CSS), open content and open source software.

### General Competences

*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, analyze and aggregate data and information with the use of the proper tools and technologies
- Manage and conduct team projects

## 3. COURSE CONTENT

How digital technologies influence, shape, chance economic activities, Definitions of the Digital Economy, The characteristics of Information goods, Basic ICT technologies, The Internet and the World Wide Web (WWW), The impact of the WWW on today's economy, E-business, E-commerce and models of digital entrepreneurship, Use cases of digital entrepreneurship, Create business models and e-commerce websites, Definition of Cryptocurrencies, The Bitcoin cryptocurrency, Theoretical frameworks for cryptocurrencies (computational complexity, cryptographic hash functions, hash pointers and digital signatures), Intellectual properties, Openness in the digital economy, Open knowledge, Open data, Open source software, Impact of open technologies on the economy.

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

<b>TEACHING METHOD</b>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>• Slides and notes to support lectures</li> <li>• Software for demonstration and practical application purposes to show statistical data processing.</li> <li>• Use of the E-Learning platform eclass in order to: <ul style="list-style-type: none"> <li>○ Organize the course material (slides, notes, examples, code snippets etc)</li> <li>○ Perform weekly online quizzes to evaluate the understanding of the related course material</li> <li>○ Hand in homeworks</li> <li>○ Communicate with the students and the class</li> </ul> </li> <li>• Open video-lectures</li> </ul>	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	39 hours
	Lab exercise	26 hours
	Team Project	60 hours
	Quizzes, individual assignments and Self-study	25 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<ol style="list-style-type: none"> <li>1. Team Project: 30%</li> <li>2. Multiple choice exam: 70%</li> </ol> <p>The evaluation criteria are available to students at eclass <a href="#">here</a></p>	

#### 5. ATTACHED BIBLIOGRAPHY

<p>- <i>Suggested literature:</i></p> <p>Jeffrey F. Rayport (2007). Introduction to E-Commerce, McGraw-Hill, 2nd edition.</p> <p>Tapscott, D. (2014). The digital economy anniversary edition: rethinking promise and peril in the age of networked intelligence. McGraw Hill Professional.</p> <p>Tapscott, D. (2000). The Digital Economy. Leader Books, 1997</p> <p>-<i>Additional Literature:</i></p> <p>Shapiro, C., &amp; Varian, H. R. (1998). Information rules: a strategic guide to the network economy. Harvard Business Press.</p> <p>Antonopoulos, A. M. (2014). Mastering Bitcoin: unlocking digital cryptocurrencies. O'Reilly Media, Inc.</p> <p>Lehdonvirta, V., &amp; Castronova, E. (2014). Virtual economies: Design and analysis. MIT Press.</p> <p>Harris, A. (2014). HTML5 and CSS3 All-in-one for Dummies. John Wiley &amp; Sons.</p> <p>-<i>Open courses:</i></p> <p>Open Course Erasmus+ «OpEn: Digital Entrepreneurship» Available from: <a href="https://openup.upatras.gr/courses/GR103/">https://openup.upatras.gr/courses/GR103/</a></p> <p>Rappa, M. (2001). Managing the digital enterprise-Business models on the Web. Διαθέσιμο: <a href="http://digitalenterprise.org/models/models.html">http://digitalenterprise.org/models/models.html</a></p> <p>Khan Academy. Internet 101. Διαθέσιμο: <a href="https://www.khanacademy.org/computing/computer-science/internet-intro">https://www.khanacademy.org/computing/computer-science/internet-intro</a></p>
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## INTRODUCTION TO CIVIL AND COMMERCIAL LAW

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	BUSINESS ADMINISTRATION		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO_DE113	<b>SEMESTER OF STUDIES</b>	3 <sup>rd</sup>
<b>COURSE TITLE</b>	INTRODUCTION TO CIVIL AND COMMERCIAL LAW		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>	General background, Specialised general knowledge		
<b>PREREQUISITE COURSES:</b>	There are no prerequisite courses.		
<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/BMA534/">https://eclass.upatras.gr/courses/BMA534/</a>		

#### 2. LEARNING OUTCOMES

##### Learning outcomes

The complexity of modern civil and commercial transactions induces the need of understanding and interpreting the basic concepts of civil and commercial law, that govern the legal transactions between individuals and other bodies corporate or unincorporated. The aim of this course is to provide students with university education which will enable acquisition of knowledge of legal principles and rules of civil and commercial law, by focusing on the following topics: general principles of civil law, conditions of validity and protection of rights according to greek civil code, law of obligations, law of contracts, contractual liability, tort, property law, company law.

By the end of this course the student will have acquired the skill of understanding and interpreting the main principles and rules of civil and commercial law, as well as identifying solutions of legal problems regarding the law of obligations , contractual liability and tort.

##### General Abilities

By the end of this course the student will furthermore be able to: Understand the main principles of civil and commercial law. Apprehend the basic rules of company law . Understand and interpret a selected number of legal problems in civil law, regarding the law of obligations, the law of contracts and tort.

#### 3. COURSE CONTENT

In this course we study the main principles and rules of civil and commercial law . In particular the topics we examine include:

- principles of civil law
- legal capacity conditions of validity and protection of civil rights according to greek civil code
- law of obligations
- law of contracts

- contractual liability
- property law
- tort
- company law

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

<b>TEACHING METHOD.</b>	Lectures	
<b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES</b>	Communication with students using the campus LMS (eclass)	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	50
	Exercises	25
	Private study	75
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours</b>
<b>STUDENT ASSESSEMENT</b>	Final exam with developing questions	

#### 5. RECOMMENDED LITERATURE (in Greek)

Π. Αγαλλοπούλου, Βασικές Έννοιες Αστικού Δικαίου, 4η εκδ. Σάκκουλας, 2016.

Π. Αγαλλοπούλου – Κορνηλία Δελούκα- Ιγγλέση, Εισαγωγή στο δίκαιο των επιχειρήσεων, 1η έκδοση, Σάκκουλας, 2016.

Χ. Τσενέ, Ανοικτά Ακαδημαϊκά μαθήματα - Βασικές έννοιες Αστικού Δικαίου, 2015. σελ. 51

## THIRD YEAR, 5<sup>th</sup> Semester (Fall)

### ECONOMETRICS

#### COURSE OUTLINE

##### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 320	<b>SEMESTER OF STUDIES</b>	5 <sup>th</sup>
<b>COURSE TITLE</b>	ECONOMETRICS		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures and tutorials		3 (Lectures), 1 (tutorials)	6
<b>COURSE TYPE</b>	Background, Skills Development		



<b>PREREQUISITE COURSES:</b>	Suggested prerequisites: Mathematics for Economists I, Mathematics for Economists II, Statistics I, Statistics II, Principles of Economics I, Principles of Economics II
<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/ECON1202/">https://eclass.upatras.gr/courses/ECON1202/</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.*

The Econometrics course introduces students to the basic econometric methods necessary to quantify the relationships between two or more variables. Specifically, students learn to:

- evaluate quantitative models of economic relations,
- interpret (in economic terms) statistical results resulting from the use of econometric methods in economic models and
- forecast (introduction) economic variables based on a given econometric model

It is the basic quantitative course that links Statistics, Mathematics and Economic Theory.

Upon successful completion of the course the student will be able to:

- Recognize simple and multiple linear regression as a tool for analyzing economic data (cross-section and time series)
- use Excel at an introductory level for econometric analysis
- provide interpretation and critical evaluation of econometric analysis results
- perform basic model validation procedures in the context of single or multiple linear regression
- read and understand reports and published empirical work that uses the concepts and methods introduced in the class
- use econometric models in academic work
- present technical results in a clear and comprehensible manner

### General Competences

*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, analyze and synthesize data and information, using the necessary technologies
- Decision making
- Autonomous Work
- Teamwork
- Production of new research ideas
- Promote free, creative and inductive thinking

## 3. COURSE CONTENT

Lecture 1 - 2 :

Definition of econometrics, Data types, Cross section data, Time series data, Panel data. Introductory statistical concepts: random variables, expected value, variance, covariance, correlation, estimators.

Lectures 3 - 4 :

Causality and spurious Correlations, The Simple Bivariate regression model, Ordinary least squares Estimation Method, Sum of Squares Decomposition

Lecture 5 - 6 :

Statistical Induction in Simple Linear Model, Forecasting under the Simple Linear Regression

Model
<p>Lecture 7 - 8 :</p> <p>Time as an explanatory variable, Logarithmic-log transformation, Logarithmic-linear transformation, Linear logarithmic transformation, Stationarity and non-stationarity, Maximum likelihood method</p> <p>Lecture 9 - 10 - 11 :</p> <p>The multiple regression model, The Gauss-Markov theorem, Disturbance terms Variance estimator, Statistical induction in the multiple model, Multiple regression model fit criteria: Coefficient of Determination, Adjusted Coefficient of Determination, AIC and BIC information criteria, Interpretation of coefficients in multiple regression and partitioned regression, Model specification, Missing variables, Introduction of unnecessary variables, Multicollinearity, Dummy variables: Seasonality, Effects of Specific Exogenous Factors, Sequentially Continuous Functions</p> <p>Lecture 12 :</p> <p>Testing joint linear restrictions. F-tests.</p> <p>Lecture 13 :</p> <p>Tests for structural breaks: Chow predictive failure test, "Restricted regression" approach, Chow breakpoint test, Structural change tests when the change point is considered unknown</p>

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

<b>TEACHING METHOD</b>	Face to face lectures and tutorials	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>• Support Learning through the e-class platform</li> <li>• Using <b>Excel</b> and the open-source program <b>gretl</b> for practice on all the taught techniques and the presentation of economic results</li> </ul>	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	39 hours(3x13)
	Practice exercises focusing on the application of methodologies and analysis of case studies to small groups of students	13 hours (1x13)
	Hours for private study of the student and preparation of home-works	98 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<p>I. Written final exam in Greek language which includes multiple-choice questions with or without justification</p> <p>II. Optional individual (grade augmentation) projects that involve econometric exercises using <b>Excel</b> and / or <b>gretl</b></p>	

#### 5. ATTACHED BIBLIOGRAPHY

- <i>Suggested bibliography:</i>
<ul style="list-style-type: none"> <li>• <i>Introduction to Econometrics, Book Code in Eudoxus: 50660777, Version: 2/2015, Authors: VENETIS IOANNIS, ISBN: 9789609427517, Type: Textbook, Owner (Publisher): GKOTSIS KON / NOS</i></li> <li>• <i>Econometrics. Book Code in Eudoxus: 2047, Issue: 1/2008, Authors: TZAVALLIS ILIAS, ISBN: 978-960-98566-0-7, Type: Trademark, Owner (Publisher): Athens University Of Economics &amp; Business</i></li> <li>• <i>Econometrics, Theory &amp; Applications, Book Code in Eudoxus: 1743, Edition: A / 2004,</i></li> </ul>

Authors: KATOS ANASTASIOS, ISBN: 960-8065-44-5, Type: Book, Publisher (Publishing): ZYGOS

-Other Greek-language bibliography:

- *Econometric Methods*, by John Dinardo, Jack Johnson, Klidarithmos Publications, 2005
- *Introduction to Econometrics* by Georgios K. Christou, Gutenberg Publications, 1998

-Other Foreign language bibliography:

- *Econometric analysis* / William H. Greene 3η έκδοση, εκδόσεις Prentice Hall, 1997
- *Dynamic econometrics* / David F. Hendry Oxford : Oxford University Press, 1995
- *Estimation and inference in econometrics*, των Russell Davidson, James G. Mackinnon, Εκδόσεις Oxford University Press, 1993
- *Introduction to statistics and econometrics*, του Takeshi, Amemiya, Εκδόσεις Harvard University Press, 1994
- *Introduction to the theory and practice of econometrics*, των George G. Judge, R.Carter Hill, William E. Griffiths, Helmut Lutkepohl and Tsoung-Chao Lee, Εκδόσεις Wiley, 1988

-Useful Internet Addresses:

<http://www.feweb.vu.nl/econometriclinks/>  
<http://www.ssc.wisc.edu/~bhansen/econometrics/>

-Related scientific journals:

Journal of Econometrics,  
 Journal of Applied Econometrics.

## ECONOMICS OF THE FIRM

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 355	<b>SEMESTER OF STUDIES</b>	5 <sup>th</sup>
<b>COURSE TITLE</b>	ECONOMICS OF THE FIRM		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>		Special background	
<b>PREREQUISITE COURSES:</b>		Suggested prerequisites: Micro-economics I and II.	
<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://www.econ.upatras.gr/en/undergraduate/courses/economics-firm">https://www.econ.upatras.gr/en/undergraduate/courses/economics-firm</a>	

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## 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.*

This course aims at the enhancement of the students' confidence about the usefulness of their studies, by showing that the theoretical knowledge obtained from the courses of Microeconomic Theory, Statistics and Econometrics, etc. can help to solve practical problems faced by business executives.

#### Competences:

1. An ability to demonstrate a broad and integrated knowledge and understanding of the scope, main areas and boundaries of intermediate micro-economic analysis of the firm. Demonstrating a critical understanding of a selection of the principal theories, principles, concepts and terminology at the core of this subject.
2. Using skills, techniques and practices that are specialized or advanced and practicing routine methods of research.
3. Undertaking critical analysis, evaluation and/or synthesis of ideas, concepts, information and issues.
4. Making formal and informal presentations on mainstream topics in the subject. Interpreting, using and evaluating numerical data.
5. Taking some responsibility for the team work and for a range of resources. Exercising autonomy and initiative in some activities at a professional level.

### General Competences

*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?*

By the end of this course students will have developed the following skills (general abilities):

- Search, analyze and synthesize data and information, using the necessary technologies
- Adapt to new situations
- Decision making
- Autonomous (Independent) work
- Teamwork
- Working in an international environment
- Working in an interdisciplinary environment
- Design and project management

## 3. COURSE CONTENT

1) Introduction to Managerial Economics: Relationships of M.E. to other disciplines. The basic process of decision making. The theory of the firm. Reasons for the existence of profit. Managerial interests and the Principal - Agent Problem.

2) Demand Theory: The market demand curve, industry and firm demand functions. The price elasticity of demand, point and arc elasticities. Price elasticity and total money expenditure. Price elasticity and pricing policy. The income elasticity of demand. Cross elasticities of demand. The advertising elasticity of demand. The constant - elasticity demand function. Case studies - Problem solving.

3) Estimating Demand Functions: The identification problem. Consumer interviews, Market experiments, regression analysis. Interpreting the computer printout. Multicollinearity, Serial correlation and analysis of the residuals. Case studies - Problem solving.

- 4) Production Theory: The production function with one and more inputs. The law of diminishing marginal returns and the optimal level of utilization of an input. Isoquants, the marginal rate of technical substitution. The optimal combination of inputs. Returns to scale and the output elasticity. Measurement and analysis of production functions. Case studies – Problem solving.
- 5) The Analysis of Costs: Opportunity costs. Short-run and long-run cost functions. Average and marginal costs. Economies of scope. Break-Even Analysis and profit contribution analysis. Case studies – Problem solving.
- 6) Pricing Practices: Cost-Plus pricing. The multiple – product firm: Demand interrelationships. Pricing of joint products: fixed proportions. Output of joint products: variable proportions. First-degree, second-degree and third-degree price discrimination. Using coupons and rebates for price discrimination. Tying and Transfer pricing. Case studies – Problem solving.
- 7) Risk Analysis: Definition of risk and probability. Probability distributions and expected values. Comparisons of expected profit. Constructing decision trees. The expected value of perfect information. Measuring attitudes towards risk: The utility approach. Constructing and using a utility function. Attitudes toward risk: three types. Measures of risk: the standard deviation and coefficient of variation. Adjusting the valuation model for risk. The use of risk adjusted discount rates. Simulation techniques and the application of the maximin rule. Case studies – Problem solving.
- 8) Capital Budgeting: The capital budgeting process, Cash flow estimation, Capital Budgeting Decision Rules: net present-value (NPV), profitability index (PI), internal rate of return (IRR), payback period. The cost of capital, crossover discount rate, the component cost of debt, the component cost of equity, the risk-free rate of return (RF), the risk premium (RP), the beta coefficient, the weighted average cost of capital, the optimal capital structure, the optimal capital budget, the investment opportunity schedule (IOS), the marginal cost of capital, the post-audit process. Case studies – Problem solving.

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

<b>TEACHING METHOD</b>	Face-to-face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of Information and Communication Technologies (ICTs) (e.g. powerpoint) in teaching and communicating with students.	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	39 hours
	Study and analysis of the literature	72 hours
	Project writing and problem sets solving	39 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	a) Submission of assignments (30%) and b) performance on the final written examination at the end of the semester (70%). The evaluation criteria are clearly defined and posted in the relevant web page of the course: <a href="https://eclass.upatras.gr/courses/ECON1230/">https://eclass.upatras.gr/courses/ECON1230/</a>	

#### 5. RECOMMENDED LITERATURE

- *Recommended Literature* :

Perloff, J. M. "Managerial Economics and Strategy (2nd Edition), The Pearson Series in Economics.

Salvatore, D. "Managerial Economics in a global Economy", Gutenberg, 2012.

Hirshcey, "Economics for Managers", Εκδόσεις Thomson, 2006

- Additional reading material is accessible at: <a href="http://eclass.upatras.gr/courses/ECON1230">http://eclass.upatras.gr/courses/ECON1230</a>
-Relevant Academic Journals: NBER Working Papers, The American Economic Review, Journal of Financial Economics, International Journal of Production Economics, Journal of Management, Management Science, Journal of Business Ethics, Journal of Business Research, Academy of Management Journal.
- Relevant Web links  <a href="http://iobe.gr/">http://iobe.gr/</a> <a href="http://www.economist.com/">http://www.economist.com/</a> <a href="http://www.ft.com/home/europe">http://www.ft.com/home/europe</a> <a href="http://europe.wsj.com/home-page">http://europe.wsj.com/home-page</a> <a href="http://www.worldbank.org/">http://www.worldbank.org/</a>

## FINANCIAL ECONOMICS

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 322	<b>SEMESTER OF STUDIES</b>	5 <sup>th</sup>
<b>COURSE TITLE</b>	FINANCIAL ECONOMICS		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>		Field of Science	
<b>PREREQUISITE COURSES:</b>		Suggested Prerequisites: Principles of Economics I & II	
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>		Greek	
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>		No	
<b>COURSE WEBPAGE (URL)</b>		<a href="http://www.econ.upatras.gr/el/undergraduate/courses/hrimatooikonomiki">http://www.econ.upatras.gr/el/undergraduate/courses/hrimatooikonomiki</a>	

#### 2. LEARNING OUTCOMES

<b>Learning outcomes</b> <i>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.</i>
<p>By the end of this course the student will be able to:</p> <ul style="list-style-type: none"> <li>• Demonstrate in-depth understanding of the information and conceptual underpinnings in areas of business planning and managing business complexity.</li> <li>• Apply theory to practice by analytically engaging with the interconnected nature of business practices such as business management, design management, sustainability management, financial management, and marketing management in the global context.</li> <li>• Identify and define complex managerial and organizational problems and apply appropriate knowledge as well as creative and entrepreneurial thinking to reach solutions.</li> <li>• Apply problem-solving techniques drawn from business management, design management, sustainability management, financial management, and marketing management, as</li> </ul>

<p>appropriate, to determine effective solutions</p> <ul style="list-style-type: none"> <li>Analyze and evaluate the impact of business decisions and formulate strategies that are appropriate for the short, the medium, and the longer term, within a global business context.</li> </ul>
<p><b>General Competences</b></p> <p><i>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?</i></p>
<p>By the end of this course the student will have developed the following skills:</p> <ol style="list-style-type: none"> <li>1. Ability to exhibit knowledge and understanding of the essential facts, concepts, theories and applications which are related to finance theory.</li> <li>2. Ability to apply this knowledge and understanding to the solution of problems related to investment decision making.</li> <li>3. Ability to prepare and execute multi-step syntheses of investment decisions</li> <li>4. Ability to interact with others in finance related issues.</li> </ol> <p>More generally, by the end of this course, the student will have developed the following abilities (from the list above):</p> <ul style="list-style-type: none"> <li>Search, analysis and synthesis of facts and information, using the necessary technologies</li> <li>Adaptation to new situations</li> <li>Decision making</li> <li>Autonomous (Independent) work</li> <li>Group work</li> <li>Exercise of criticism and self-criticism</li> <li>Promotion of free, creative and inductive thinking</li> <li>Work design and management</li> </ul>

### 3. COURSE CONTENT

<ul style="list-style-type: none"> <li>Introduction to the basic concepts of modern finance</li> <li>Time Value of Money</li> <li>Debt Valuation and Interest Rates</li> <li>Stock Valuation</li> <li>Risk and Return relationship &amp; Portfolio Theory</li> <li>Asset Pricing Models (CAPM)</li> <li>The cost of capital</li> <li>Capital Expenditure Budget. Criteria for Investment Decisions</li> <li>Capital Structure Policy &amp; Dividend Policy</li> <li>Corporate Risk Management</li> </ul>
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### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face lectures	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of Information and Communication Technologies (ICTs) in teaching (e-class).	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures, 3 hours per week	13X3 = 39 hours
	Individual study	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	Final written exam	

### 5. ATTACHED BIBLIOGRAPHY

<p>- <i>Suggested bibliography:</i></p> <p>Brealey, R. A., S.C. Myers and A.J. Marcus (2012), Fundamentals of Corporate Finance, McGraw-</p>
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Hill International Edition.

David Hillier, Stephen Ross, R. Westerfield, J. Jaffe, B. Jordan (2010) Corporate Finance, European version, New York, McGraw-Hill Irwin.

Atrill, P. & McLaney, E. J. (2011) Accounting and finance for non-specialists 7th edn. Harlow & New York: Prentice Hall Financial Times.

GITMAN L. J. & ZUTTER C.J. (2015). Principles of Managerial Finance Global Edition, 14/E. Pearson Education. UK

*-Related Academic Journals:*

European Corporate Finance, International Review of Finance, Journal of Applied Corporate Finance

## HISTORY OF ECONOMIC THOUGHT

### COURSE OUTLINE

#### 1. GENERAL

1. GENERAL			
SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	ECONOMICS		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECO_340	SEMESTER OF STUDIES	5 <sup>th</sup>
COURSE TITLE	HISTORY OF ECONOMIC THOUGHT		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures		3	6
COURSE TYPE	Field of Economics Science		
PREREQUISITE COURSES:	Suggested Prerequisites: Economic History Principles of Economics I & II		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBPAGE (URL)	<a href="http://www.econ.upatras.gr/en/undergraduate/courses/history-economic-thought">http://www.econ.upatras.gr/en/undergraduate/courses/history-economic-thought</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.*

The course introduces students to basic concepts of the History of Economic Thought, which is essential for every student of Economic Sciences. After successful completion of the course, students are expected to:

- Have the ability to understand the evolutionary course of the development of economic thinking.
- Understand the contribution of major economists in the past to building modern economic analysis.
- Process and critically evaluate the arguments of each school of economic thought.
- Can use rationale and corresponding arguments on issues of modern economic policy.

**General Competences**

*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 and compilation of information
- Decision making
- Working in an interdisciplinary environment
- Promote free, creative and inductive thinking

**3. COURSE CONTENT**

The ancient authors. Medieval economic thought. The mercantilists. The Physiocrats. The transition period. The Classics. Adam Smith, Malthus, Ricardo, Marx. The beginnings of mathematical economics. The socialists. Marginalism & the neo-classical approach. The contribution of Keynes. Schumpeter & the theory of economic development. Monetarism. Galbraith and "the new industrial state". The New-Classical School. The New-Keynesian School. New-Marxists & radical economists. Recent developments in economic theory.

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

<b>TEACHING METHOD</b>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of IT in teaching, and in communication with the students (e-class).	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	13X3 = 39 hours
	Reading	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	End of semester final written exam	

**5. ATTACHED BIBLIOGRAPHY**

- *Suggested bibliography:*

- *In Greek:*

E.Screpanti-S. Zamagni, Ιστορία της Οικονομικής Σκέψης, εκδόσεις "Τυπωθήτω" - Γιώργος Δαρδανός, 2004.

Robert L. Heilbroner, Οι Φιλόσοφοι του Οικονομικού Κόσμου, εκδόσεις Κριτική, 2000.

Σ. Δρακόπουλος-Αν. Καραγιάννης, Ιστορία της Οικονομικής Σκέψης, εκδόσεις Κριτική, 2004.

- *Scientific Journals:*

Journal of the History of Economic Thought, The History of Economics Review

**ENERGY ECONOMICS****COURSE OUTLINE****1. GENERAL**

<b>SCHOOL</b>	ECONOMICS & BUSINESS
<b>DEPARTMENT</b>	ECONOMICS
<b>LEVEL OF COURSE</b>	UNDERGRADUATE

COURSE CODE	ECO 393	SEMESTER OF STUDIES	5 <sup>th</sup>
COURSE TITLE	ENERGY ECONOMICS		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures and tutorials		3(lect.), 1(tut.)	6
COURSE TYPE	Field of Science and Skills Development		
PREREQUISITE COURSES:	Suggested prerequisites: Microeconomics I & II		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	Yes (in English)		
COURSE WEBPAGE (URL)	<a href="https://eclass.upatras.gr/courses/ECON1308/">https://eclass.upatras.gr/courses/ECON1308/</a> <a href="https://eclass.upatras.gr/courses/ECON1321/">https://eclass.upatras.gr/courses/ECON1321/</a> (Open course)		

## 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.*

By the end of this course the student will be able to:

#### 1) Knowledge

- Understand the basic concepts and theoretical approaches related to Energy Economics.
- Be aware of the problem-solving methodology, the mechanisms that govern the basic concepts and the policy measures needed to address failures of this market.

#### 2) Skills

- Distinguish the different cases of mathematical problems and to explain their use in relation to the mathematical problem posed.
- Explain specific phenomena that occur in the field of Energy Economics and examine the reasons behind them.

#### 3) Capabilities

- Combine theory with economic problems that fall within the course and successfully proceed with their modeling (e.g. pricing in the energy market).
- Rebuild the economic problem (e.g. Maximize a business's profit) and explain the solution taking into account the parameters of the specific area of energy economics.
- Be able to use the literature review on relevant topics.
- Be able to compose specific information from databases or the literature to produce own results or explain phenomena.
- Be able to evaluate, compare and support the economic dimension (interprets) the solution in the new context given.

### General Competences

*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?*

By the end of this course the student will, have developed the following skills (general abilities):

3. Ability to exhibit knowledge and understanding of the essential facts, concepts, theories and applications related to the specific course.
4. Ability to apply this knowledge and understanding to the solution of problems.

More generally, by the end of this course the student will, have develop the following general abilities (from the list above):

- Searching, analysis and synthesis of facts and information, as well as using the necessary technologies
- Adaptation to new situations

- Decision making
- Autonomous (Independent) work
- Group work
- Exercise of criticism and self-criticism
- Promotion of free, creative and inductive thinking
- Respect to natural environment
- Work design and management

### 3. COURSE CONTENT

1. Basic concepts and definitions related to Energy Economics.
2. Demand and supply. Indicating their determinants, changes in supply or demand and different market structures (full competition, monopoly, etc.)
3. Energy markets (failures and equilibria)
4. Pricing in the Energy Market (energy pricing models and examples)
5. Economics of Renewable Energy Sources
6. Energy Efficiency (Energy Conservation and Efficiency, Models of Efficiency and Productivity)
7. Research and Development and Innovation in Energy Markets (Present state of energy security and energy dependency, the role of climate change and the importance of R & D and innovation in the sector)
8. Economics of Climate Change (current situation, mitigation and mitigation measures, and policies)
9. Climate Change Policies (Kyoto Protocol and Copenhagen Accord - short presentation)

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	a) Lectures and tutorials and face to face. b) Supplementary learning based on the material in the open course entitled "Energy Economics" <a href="https://eclass.upatras.gr/courses/ECON1321/">(https://eclass.upatras.gr/courses/ECON1321/)</a>	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of Information and Communication Technologies (ICTs) (e.g. PowerPoint) in teaching. The lectures for each chapter are uploaded on the e-class platform, in the form of ppt files, which the enrolled students can freely download.	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures (3 hours per week x 13 weeks)	39 hours
	Tutorials (1 hour per week x 13 weeks)	13 hours
	Hours for private study	98 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	a) Written examination at the end of the semester (70%) - final grade. b) Assignments with a 30% weight factor to the total grade.	

### 5. ATTACHED BIBLIOGRAPHY

- *Suggested bibliography:*

Karkalakos, S., and Polemis, M., Sustainable development, Environment and Energy, Edition 1st 2015

Bhattacharyya, Subhes C. (2011) Energy Economics: Concepts, Issues, Markets and Governance.

Springer.

Evans, Joanne and Lester Hunt, (2009), International Handbook on the Economics of Energy. Edward Elgar

Stevens P (2000) An introduction to energy economics. In: Stevens P (ed) The economics of energy, vol 1. Edward Elgar, Cheltenham

Pascual, C and Elkind J., Energy Security: Economics, Politics, strategies and Implications, (2010) (κεφ.9ο)

Kounetas, K., (2018). "Energy consumption and CO2 emissions convergence in European Union member countries. A tonneau des Danaïdes?" Energy Economics, 69, pp.111–127

Kounetas K., and Tsekouras K., (2008), "The Energy Efficiency Paradox Revisited through a Partial Observability Approach", Energy Economics, Vol.30, 2517-2536.

- Journals

<https://www.jstor.org/journal/energyj>

<https://www.journals.elsevier.com/energy-policy/>

<https://www.journals.elsevier.com/energy-economics/>

## BUSINESS ADMINISTRATION II

### COURSE OUTLINE

#### 1. GENERAL

1. GENERAL			
SCHOOL		ECONOMICS & BUSINESS	
DEPARTMENT		BUSINESS ADMINISTRATION	
LEVEL OF COURSE		UNDERGRADUATE	
COURSE CODE		ECO_DE313	SEMESTER OF STUDIES 5 <sup>th</sup>
COURSE TITLE		BUSINESS ADMINISTRATION II	
INDEPENDENT TEACHING ACTIVITIES			TEACHING HOURS PER WEEK
Lectures and case studies			3
			6
COURSE TYPE		Field of Science	
PREREQUISITE COURSES:		There are no prerequisite courses.	
TEACHING AND ASSESSMENT LANGUAGE:		Greek	
THE COURSE IS OFFERED TO ERASMUS STUDENTS		No	
COURSE WEBPAGE (URL)		<a href="https://eclass.upatras.gr/courses/BMA572/">https://eclass.upatras.gr/courses/BMA572/</a>	

#### 2. LEARNING OUTCOMES

<b>Learning outcomes</b>
The main objective of this course is to familiarize students with the contemporary trends of Business Administration. Particular emphasis will be placed on the critical approach to basic concepts and theories of management science and to the analysis of practices that have implemented by leading organizations.

At the end of this course the student should be able to:

3. Understand the basic concepts and theories related to Management science.
4. Understand and interpret critically the managerial practices in today's business.

#### **General Abilities**

At the end of the course the student will have further developed the following skills/competences:

1. Analyzing theoretical concepts and investigating relevant managerial practices.
2. Presentation of ideas and solutions to problems concerning basic operations of contemporary business.

### **3. COURSE CONTENT**

1. Business environment
2. Corporate Social Responsibility
3. Strategic Management
4. Organizational Design
5. Communication
6. Leadership styles
7. Controlling
8. Decision Making

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

<b>TEACHING METHOD</b>	Lectures	
<b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES</b>	The lectures content of the course for each chapter are uploaded on the internet (e-class), in the form of a series of ppt files, where from the students can freely download them using a password which is provided to them at the beginning of the course.	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	42
	Case studies - Individual Assignments	26
	Hours for private study of the student	82
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours</b>
<b>STUDENT ASSESSEMNT</b>	The grade is calculated on the basis of the final written exam (theory, case studies).	

### **5. RECOMMENDED LITERATURE**

Bateman T. and Snell S. (2013). *Management: Leading & Collaborating in a Competitive World*, McGraw-Hill/Irwin.

Schermerhorn J. (2012). *Management*, John Wiley & Sons.

## SPECIAL ISSUES OF POLITICAL ECONOMY AND QUANTITATIVE ANALYSIS

### COURSE OUTLINE

#### 1. GENERAL

SCHOOL		ECONOMICS & BUSINESS	
DEPARTMENT		BUSINESS ADMINISTRATION	
LEVEL OF COURSE		UNDERGRADUATE	
COURSE CODE		ECO_DE225	SEMESTER OF STUDIES 5 <sup>th</sup>
COURSE TITLE		SPECIAL ISSUES OF POLITICAL ECONOMY AND QUANTITATIVE ANALYSIS	
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures		3	6
COURSE TYPE		Field of Science	
PREREQUISITE COURSES:		Typically there are no prerequisite courses. However, sufficient background knowledge on Economic Science (Microeconomics, Macroeconomics, Public Economics, Political Economy), Algebra (matrices, eigenvalues, eigenvectors), Calculus (implicit function) and Statistical Analysis (ANOVA, linear regression) is required.	
TEACHING AND ASSESSMENT LANGUAGE:		Greek	
THE COURSE IS OFFERED TO ERASMUS STUDENTS		No	
COURSE WEBPAGE (URL)		<a href="https://eclass.upatras.gr/courses/BMA524/">https://eclass.upatras.gr/courses/BMA524/</a>	

#### 2. LEARNING OUTCOMES

<b>Learning outcomes</b>
<ul style="list-style-type: none"> <li>Knowledge of specific areas of political economy with emphasis on the theory of economic crises, in combination with quantitative research tools.</li> <li>At the end of the course the student should be able to know:               <ol style="list-style-type: none"> <li>Aspects of the Marxian theory of economic crises.</li> <li>Issues related to international economic competition and development inequality at an international level.</li> <li>Heterodox theoretical approaches to Foreign Direct Investment.</li> <li>Methods of quantitative analysis in real data for interpreting the performance of a national economy.</li> </ol> </li> </ul>
<b>General Abilities</b>
Basic scientific research <ul style="list-style-type: none"> <li>Autonomous (Independent) work</li> <li>Exercise of criticism</li> <li>Promotion of free, creative and inductive thinking</li> </ul>

#### 3. COURSE CONTENT

<ol style="list-style-type: none"> <li>Theory of Economic Crises</li> <li>Intra- and inter-sectoral competition (terms of trade) and value appropriation in the sphere of circulation</li> <li>Issues of economic development: the concept of “extraverted” development</li> <li>Theory of Foreign Direct Investment</li> </ol>
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v.	Principal Components Analysis (PCA)
vi.	Mathematical models
vii.	Modeling techniques (methods of linear and nonlinear regression)
viii.	Input - Output Analysis

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

<b>TEACHING METHOD</b>	Lectures face to face	
<b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES</b>	Support Learning through the e-class platform	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	36
	Preparation of home-works	30
	Hours for private study	84
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150</b>
<b>STUDENT ASSESSEMENT</b>	The grade is calculated as the weighted average of the final written exam (50%) and two home-works (50%).	

#### 5. RECOMMENDED LITERATURE

1. Economakis, G. (2016), *Special Issues of Political Economy and Quantitative Analysis: Notes*, Section I: Basic Theoretical Framework, Patras: University of Patras [in Greek].
2. Crawley, M. J. (2005), *Statistics, An Introduction using R*, Chichester: John Wiley & Sons.
3. Notes and papers in e-class [in Greek].

## BUSINESS LAW

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	BUSINESS ADMINISTRATION		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO_DE227	<b>SEMESTER OF STUDIES</b>	5 <sup>th</sup>
<b>COURSE TITLE</b>	BUSINESS LAW		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>		General background, Specialised general knowledge	
<b>PREREQUISITE COURSES:</b>		There are no prerequisite courses.	
<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/BMA535/">https://eclass.upatras.gr/courses/BMA535/</a>	

#### 2. LEARNING OUTCOMES

<b>Learning outcomes</b>
Business Law is fundamental in creating reliable standarts for companies to follow. This course

provides students with fundamental elements of company law , by focusing on the following topics of SA companies and limited liability companies : basic principles of company law, separate legal personality, formation – registration- articles of association, Board of directors, appointment and removal of members of Board of directors, directors duties and liability, share issues- share capital- shareholders, resolutions and meetings, termination of company. The course also presents basic regulation on negotiable instruments as payment systems (banking cheques – bills of exchange), and an introduction to competition law and unfair business practices law . By the end of this course the student will have acquired the skill to apprehend :

1. Statutory distinctions of companies
2. The economic and legal environment of S.A companies
3. The legal specificities of limited liability companies
4. The legal rules of operation of bank cheques and bills of exchange
5. Main issues of competition law and business unfair practices law.

#### **General Abilities**

Business Law is fundamental in creating reliable standards for companies to follow. This course provides students with fundamental elements of company law , by focusing on the following topics of SA companies and limited liability companies : basic principles of company law, separate legal personality, formation – registration- articles of association, Board of directors, appointment and removal of members of Board of directors, directors duties and liability, share issues- share capital- shareholders, resolutions and meetings, termination of company. The course also presents basic regulation on negotiable instruments as payment systems (banking cheques – bills of exchange), and an introduction to competition law and unfair business practices law . By the end of this course the student will have acquired the skill to apprehend :

1. Statutory distinctions of companies
2. The economic and legal environment of S.A companies
3. The legal specificities of limited liability companies
4. The legal rules of operation of bank cheques and bills of exchange
5. Main issues of competition law and business unfair practices law.

### **3. COURSE CONTENT**

1. Introduction to company law
2. Types of companies
3. Sources of company law
4. Regulation of SA companies- principal provisions: formation – registration -articles of association, - share capital – shareholders: general meetings of shareholders, rights of shareholders- Board of directors : appointment - dismissal - general duties of members of the Board of directors . Resolutions and meetings. Accounts and reports- audit - mergers - termination - dissolution of company
5. The regulation of limited liability companies - general provisions- limited liability, formation - registration -articles of association, capital- members- meetings of members, directors: appointment - dismissal. Termination of company.
6. Legal rules on cheques and bills of exchange
7. Introduction to Competition Law and unfair business practices law.

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

<b>TEACHING METHOD.</b>	Lectures
<b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES</b>	Communication with students using the campus LMS (eclass)

<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	50
	Exercises	25
	Private study	75
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours</b>
<b>STUDENT ASSESSEMENT</b>	Final exam with Multiple choice questionnaires and developing questions	

### 5. RECOMMENDED LITERATURE (in Greek)

Γ. Αργυρός, Εμπορικό Δίκαιο, Βασικές έννοιες, Εκδόσεις Μπένου, 1η εκδ.2017

Ν. Ρόκας, Εμπορικές Εταιρείες, 7η εκδ. Νομική Βιβλιοθήκη, 2012.

## THIRD YEAR, 6<sup>th</sup> Semester (Spring)

### PUBLIC ECONOMICS

#### COURSE OUTLINE

##### 1. GENERAL

1. GENERAL			
SCHOOL		ECONOMICS & BUSINESS	
DEPARTMENT		ECONOMICS	
LEVEL OF COURSE		UNDERGRADUATE	
COURSE CODE		ECO 312	SEMESTER OF STUDIES 6th
COURSE TITLE		PUBLIC ECONOMICS	
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures		3	6
COURSE TYPE		Field of Science, General knowledge	
PREREQUISITE COURSES:		Suggested prerequisites: Microeconomics I and II. Public Economics is a major field of Economics, which is based primarily on Microeconomic theory. Thus, it is suggested to the students to review the contents of Microeconomics II ( (Welfare economics, Edgeworth box, utility and production possibility frontiers, social welfare function, public goods, externalities, Coase theorem etc.) as well as Microeconomics I (consumer and producer surplus, perfect competition, taxes and calculation of deadweight losses etc.) before they register in this course.	
TEACHING AND ASSESSMENT LANGUAGE:		Greek	
THE COURSE IS OFFERED TO ERASMUS STUDENTS		No	
COURSE WEBPAGE (URL)		<a href="https://eclass.upatras.gr/modules/document/?course=ECON1251">https://eclass.upatras.gr/modules/document/?course=ECON1251</a>	

##### 2. LEARNING OUTCOMES

<p><b>Lerning outcomes</b></p> <p><i>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.</i></p> <p>Given the significant role that the state plays in contemporary economies, the course Public Economics is a compulsory course in the Department's Program of Studies. It investigates the role of the public sector in the economic arena. It examines and analyzes in depth the interventions of the state in the operation of national economies and, in particular, taxation and public spending.</p> <p>By the end of this course the students will have sufficient knowledge and economic understanding of the major issues concerning taxation and public spending. They will be able to explain why government intervention is needed, how it influences the behavior of the private sector and what the welfare effects of such influences are. Furthermore, they will be able to express themselves in a professional manner on contemporary issues regarding state intervention, to use efficiently the acquired knowledge and understanding in order to support their view on specific aspects of taxation and public spending issues, to employ the acquired tools of economic analysis in the process of policy evaluation (e.g., public goods, externalities, income distribution, etc.) Furthermore, given the availability of statistical data bases concerning taxation and public spending, the students will be able to perform basic statistical and econometric analysis and thus provide empirical evidence on the issues that they investigate.</p>
<p><b>General Competences</b></p> <p><i>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?</i></p> <ul style="list-style-type: none"> <li>• Search, analysis and synthesis of facts and information</li> <li>• Decision making</li> <li>• Advancement of independent, creative and inductive thinking</li> <li>• Independent work</li> <li>• Team work</li> </ul>

### 3. COURSE CONTENT

Political mechanism of decision making, taxation and income distribution, taxation and efficiency, taxation planning, personal income tax and economic behavior (e.g., labor supply, savings, real estate) corporate income tax and economic behavior of the firm, taxing consumption and wealth, financing through budget deficits, Public goods, externalities and state intervention, income redistribution, social security.
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### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face class lectures	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	The lectures content, in the form of power point presentations, for each chapter is uploaded on the e-class platform. The students have free access to this material.	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Class lectures and seminars	39 hours (3*13)
	Study at home	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESMENT</b>	Student evaluation is conducted through a written (final) multiple choice exam (40 questions, each with five alternative answers) which covers the entire course content. Successful completion of the course requires at least 20 correct answers. A sample test and information regarding the nature of the exam can be found at the e-class course page, which is accessible by all students.	

### 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

H. Rosen, T. Gayer, V. Rapanos and G. Kaplanoglou, "Public Economics: Modern theory and Greek reality", "Kritiki" publishers, Athens 2009, (in Greek)

J. Stiglitz, "Economics of the Public Sector", "Kritiki Publishers, Athens, 1992, (in Greek)

## ECONOMIC POLICY

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 350	<b>SEMESTER OF STUDIES</b>	6 <sup>th</sup>
<b>COURSE TITLE</b>	ECONOMIC POLICY		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>	Field of Science		
<b>PREREQUISITE COURSES:</b>	Suggested prerequisites: Macroeconomics II, Microeconomics II		
<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://www.econ.upatras.gr/en/undergraduate/courses/economic-policy">https://www.econ.upatras.gr/en/undergraduate/courses/economic-policy</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.*

At the end of this course, students will be able to:

- Analyze macroeconomic developments in a structured way.
- Formulate criticism of economic policy measures and interventions.
- Critically examine the links between the different macroeconomic and microeconomic theories and economic policy options.
- Know and critically analyze the main problems of macroeconomic and microeconomic policy at the European level.
- Summarize and evaluate empirical work on economic policy issues.
- Compare and contrast empirical work on the design of economic policy.
- Critically analyze how microeconomic and macroeconomic theory influence the practical implementation of economic policy measures at national and European level.
- Contribute to the design of economic policy as executives of competent institutions.

##### General Competences

*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?*

- Autonomous (independent) work
- Search, analyze and synthesize data and information, using the necessary technologies
- Decision making
- Adapt to new situations

- Work in an international environment
- Production of new research ideas
- Promoting free, creative and inductive thinking

### 3. COURSE CONTENT

Introduction. Microeconomic Policies. The Common Agricultural Policy. Regional Policy / Cohesion Policy. Competition policy. Trade policy. Basic Macroeconomic Policy Tools. Key Elements of Monetary Integration. Perfect Monetary Areas. The European Monetary Union. Fiscal Policy and Stability Pact. The Financial Markets and the Euro. The Eurozone in Crisis.

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face lectures	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of ICT in teaching and communication with students through the e-class platform	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	39 hours (3X13)
	Private study	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	I. Final written test based on multiple-choice questions (100%). II. Optional written scientific essay, based on the quality of which, the grade of the written final test can be increased by 1 to 2 points.	

### 5. ATTACHED BIBLIOGRAPHY

*-Recommended Literature:*

Baldwin, R. and Wyplosz, C. 2017. The Economics of European Integration. Oxford University Press.

*-Indicative Additional Literature:*

Keynes, J.M. 1936. The General Theory of Employment, Interest and Money. London, Macmillan.

Tinbergen, J. 1952. On the Theory of Economic Policy. North Holland.

Persson, T. and Tabellini, G. 1990. Macroeconomic Policy, Credibility and Politics. Harwood Academic Publishers.

Dornbusch, R. 1993. Policymaking in the Open Economy. Oxford University Press.

*-Relevant scientific journals:*

Journal of Political Economy; American Economic Review; Economic Policy; European Economic Review; Economic Analysis and Policy; Journal of Economic Policy Reform; American Economic Journal; Economic Policy; Journal of European Integration; European Planning Studies

*-Relevant web sites:*

Bank of Greece: <http://www.bankofgreece.gr>

Hellenic Republic, Ministry of Finance: <http://www.minfin.gr>

Parliamentary Budget Office: <http://www.pbo.gr/el-gr/>

International Monetary Fund: <http://www.imf.org>

European Commission, DG Economic and Financial Affairs:

[https://ec.europa.eu/info/departments/economic-and-financial-affairs\\_en](https://ec.europa.eu/info/departments/economic-and-financial-affairs_en)

European Central Bank: <https://www.ecb.europa.eu>

OECD Economics Department: <http://www.oecd.org/eco/> <http://www.oecd->

[library.org/economics/oecd-economics-department-working-papers\\_18151973](http://library.org/economics/oecd-economics-department-working-papers_18151973)

Paul Krugman's NYT Blog: <https://www.nytimes.com/column/paul-krugman>

Financial Times: <https://www.ft.com>

The Economist: <https://www.economist.com>

## GREEK ECONOMIC HISTORY

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>		ECONOMICS & BUSINESS	
<b>DEPARTMENT</b>		ECONOMICS	
<b>LEVEL OF COURSE</b>		UNDERGRADUATE	
<b>COURSE CODE</b>	ECO_230	<b>SEMESTER OF STUDIES</b>	6 <sup>th</sup>
<b>COURSE TITLE</b>	GREEK ECONOMIC HISTORY		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>	Field of Economics Science		
<b>PREREQUISITE COURSES:</b>	Suggested Prerequisites: Economic History		
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>	Greek		
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>	No		
<b>COURSE WEBPAGE (URL)</b>	<a href="http://www.econ.upatras.gr/el/undergraduate/courses/elliniki-oikonomiki-istoria">http://www.econ.upatras.gr/el/undergraduate/courses/elliniki-oikonomiki-istoria</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.*

After successful completion of the course, students are expected to:

- Have familiarized themselves with issues of Greek economic history
- Evaluate and compare theoretical and empirical approaches to the economic history of Greece
- Understand and explain the "Greek" road to capitalism and its peculiarities
- Critically evaluate the impact of these processes on the structure and change of society, entrepreneurship and business in Modern Greek history.

##### General Competences

*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 and compilation of information
- Decision making
- Working in an international environment
- Working in an interdisciplinary environment
- Promote free, creative and inductive thinking



### 3. COURSE CONTENT

Introduction. Agricultural production during the Ottoman occupation. The development of trade, transportation & merchant marine in the Aegean Sea in the last period of the pre-Revolutionary Greece. The economic problems of the New Greek State: the issue of land ownership, the distribution of land, the development of commerce & the first attempts towards industrialization. State & economic policy in the 19th century. The inter-war period. Agricultural revolution & agricultural development. Industrial development during the inter-war period. Post-war economic developments in Greece.

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of IT in teaching, and in communication with the students (e-class).	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	13X3 = 39 hours
	Reading	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	End of semester final written exam	

### 5. ATTACHED BIBLIOGRAPHY

- <i>Suggested bibliography:</i>
- <i>In Greek:</i>
K. Κωστής-Σ. Πετμεζάς (επιμέλεια), Η Ανάπτυξη της Ελληνικής Οικονομίας τον 19ο Αιώνα, εκδόσεις Αλεξάνδρεια, 2006
B. Κρεμμυδάς (επιμέλεια), Εισαγωγή στη Νεοελληνική Οικονομική
Ιστορία (18ος-20ός Αιώνας), εκδόσεις "Τυπωθήτω" - Γιώργος Δαρδανός, 2005.
Σακελλαρόπουλος, Θ. (επιμέλεια), Οικονομία και Πολιτική στη Σύγχρονη Ελλάδα, τομ. Α' & Β', εκδόσεις Διόνικος, 2004.
- <i>Scientific Journals:</i>
Ιστορικά (In Greek), European Review of Economic History

## FINANCIAL ANALYSIS & MANAGEMENT

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO_332	<b>SEMESTER OF STUDIES</b>	6 <sup>th</sup>
<b>COURSE TITLE</b>	FINANCIAL ANALYSIS & MANAGEMENT		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures and tutorials		3(lect.), 2(tut.)	6
<b>COURSE TYPE</b>	Skills development		

<b>PREREQUISITE COURSES:</b>	Suggested prerequisites: Accounting I & II
<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://www.econ.upatras.gr/en/undergraduate/courses/financial-economics">https://www.econ.upatras.gr/en/undergraduate/courses/financial-economics</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.*

Students will develop an understanding of the demand and supply of accounting information and the role of financial analysis and analysts and the estimation of the statistical characteristics of the accounting figures.

### Competences:

Students are also expected to gain a balanced view of the use of accounting information for decision making and the reliability of accounting statements. They will develop an understanding of the use of multi-variate statistical models used to predict failure prediction and bond rating and will gain a strong background about the use of the basic tools of financial analysis.

### General Competences

*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?*

By the end of this course students will develop the following skills (general abilities):

- Search, analyze and synthesize data and information, using the necessary technologies
- Adapt to new situations
- Decision making
- Autonomous (Independent) work
- Group work (project)
- Working in an international environment

## 3. COURSE CONTENT

- Weeks 1,2: Overview of Financial Statement Analysis
- Weeks 3,4: Financial Reporting and Analysis
- Weeks 5,6: Cash Flow Analysis
- Weeks 7,8: Return on Invested Capital and Profitability Analysis
- Weeks 9,10: Credit Analysis
- Weeks 11,12: Equity Analysis and Valuation
- Week 13: Case studies and Problems solution

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face-to-face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of Information and Communication Technologies (ICTs) (e.g. powerpoint) in teaching and communicating with students.	
<b>TEACHING ORGANIZATION</b>	<b>Δραστηριότητα</b>	<b>Φόρτος Εργασίας Εξαμήνου</b>
	Lectures, 3 hours per week	(13X3) = 39 hours
	Tutorials, 2 hours per week	(13X2) = 26 hours
	Study and analysis of the literature	46 hours
	Project writing and problem sets solving	39 hours
	<b>Total number of hours for the</b>	<b>150 hours (total)</b>

	<b>Course (25 hours of work-load per ECTS credit)</b>	<b>student work-load)</b>
<b>STUDENT ASSESMENT</b>	a) Submission of group projects and assignments (40%) and b) performance on the final written examination at the end of the semester (60%). The evaluation criteria are clearly defined and posted in the relevant web page of the course: <a href="https://eclass.upatras.gr/modules/document/?course=ECON1280">https://eclass.upatras.gr/modules/document/?course=ECON1280</a>	

## 5. RECOMMENDED LITERATURE

### -Recommended Literature :

"Financial Statement Analysis", K. R. Subramanyam, Mc Graw Hill, 2014.

"Analysis and Valuation of Firms", D. Gikas, A. Papadaki, G. Siougle, Mpenos 2010.

### -Additional Literature :

Additional reading material is accessible at:

<https://eclass.upatras.gr/modules/document/?course=ECON1280>

### -Relevant Academic Journals:

The Accounting Review, Journal of Accounting and Economics, Journal of Accounting Research, Contemporary Accounting Research, Review of Accounting Studies, Accounting, Organizations and Society, Management Accounting Research, Accounting, Auditing & Accountability Journal, Critical Perspectives on Accounting, Accounting Horizons.

### - Relevant Web links

American Accounting Association (<http://aaahq.org>)

British Accounting Association (<http://www.baa.group.shef.ac.uk/>)

CFA Institute (<http://www.cfainstitute.org>)

European Accounting Association (<http://www.eaa-online.org>)

Business Week (<http://www.businessweek.com>)

The Economist (<http://www.economist.com>)

Eurostat (<http://epp.eurostat.ec.europa.eu/>)

Financial Times (<http://www.ft.com>)

Google Finance (<http://www.google.com/finance>)

Reuters (<http://www.reuters.com>)

Yahoo! Finance (<http://finance.yahoo.com/>)

Committee of European Securities Regulators (CESR) (<http://www.cesr-eu.org>)

European Union ([http://europa.eu/index\\_en.htm](http://europa.eu/index_en.htm))

International Accounting Standards Board (IASB) (<http://www.iasb.org>)

## OPERATIONAL RESEARCH

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 352	<b>SEMESTER OF STUDIES</b>	6 <sup>th</sup>
<b>COURSE TITLE</b>	OPERATIONAL RESEARCH		
<b>INDEPENDENT TEACHING ACTIVITIES</b>	<b>TEACHING HOURS</b>	<b>ECTS CREDITS</b>	

		PER WEEK	
Lectures & tutorials		3(lect.) 2(tut.)	6
<b>COURSE TYPE</b>	Field of Science and Skills Development		
<b>PREREQUISITE COURSES:</b>	Suggested prerequisite: Mathematics for Economists I & II		
<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/ECON1281/">https://eclass.upatras.gr/courses/ECON1281/</a> <a href="https://eclass.upatras.gr/courses/ECON1318/">https://eclass.upatras.gr/courses/ECON1318/</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.*

Operational Research is a quantitative course aiming at introducing students to the concept of business research and more specifically into problems related to the management and coordination of business in an organization. The course begins with the analysis of a real problem as an example and the corresponding data collection of this problem. It continues with the construction of a mathematical model (modeling) that describes the essence of the real problem and ends with solving, drawing conclusions and controlling solutions.

By the end of this course the student will be able to:

#### 1) Knowledge

- Understand the mathematical theory (concepts, theorems, proofs) related to this course.
- Identify the theory-related mathematical formulas and describe how to solve them (e.g M-Method).

#### 2) Skills

- Distinguish the different cases of mathematical problems and explain their use in relation to the mathematical problem posed.
- Evaluate key elements of the theory (e.g. solution through Simplex technique).

#### 3) Capabilities

- Combine mathematical theory with economic problems that fall within the subject and successfully proceed with their modeling.
- Rebuild the financial problem (e.g. Maximize a business's profit) and explain the solution found.
- Be able to evaluate, compare and interpret the economic dimension of the solution in the new context given.
- Reformat the problem based on its data and proceed to a new solution (e.g. sensitivity analysis).
- Combine the theoretical framework with the use of a computer program (R, Lindo, Excel) and evaluate its results.

### General Competences

*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?*

By the end of this course the student will, have developed the following skills:

1. Ability to exhibit knowledge and understanding of the essential facts, concepts, theories and applications related to the specific course.
2. Ability to apply this knowledge and understanding to the solution of problems.

More generally, by the end of this course the student will have developed the following abilities (from the list above):

- Search, analysis and synthesis of facts and information using the necessary technologies
- Adaptation to new situations

- Decision making
- Autonomous (Independent) work
- Group work
- Exercise of criticism and self-criticism
- Promotion of free, creative and inductive thinking
- Respect to natural environment
- Work design and management

### 3. COURSE CONTENT

1. Introduction to operational research. Deterministic & stochastic methods in operational research.
2. The basics of linear programming (LP). Graphical solutions of LP problems. The general LP problem. Interpretation & mathematical formulation.
3. Applications of LP to well-known operational research problems.
4. The Simplex Method, typical form, algorithm. Problem solving using the Simplex Method.
5. The M-method and the TWO-PHASE method.
6. Duality, properties of dual problems and the Dual Simplex. Sensitivity analysis.
7. Special cases of LP problems.
8. The transportation problem.
9. Integer and mixed LP problems.
10. Solve LP problem using R

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	a) Lectures and tutorials and face to face. b) Supplementary learning based on the material of the open course entitled "Operational Research (Applications with R Software)" <a href="https://eclass.upatras.gr/courses/ECON1318/">https://eclass.upatras.gr/courses/ECON1318/</a>	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	a) Use of Information and Communication Technologies (ICTs) (e.g. PowerPoint) in teaching. The lectures for each chapter are uploaded on the e-class platform in the form of ppt files, where from the enrolled students can freely download. B) Use of R program to consolidate theory and solve problems.	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures (3 hours per week x 13 weeks)	(3x13) 39 hours
	Tutorials (2 hour per week x 13 weeks) - solving of representative problems using the open source software of R	(2x13) 26 hours
	Hours for private study	85 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMNT</b>	a) Written examination at the end of the semester (70%) b) Individual assignment (30%) involving modeling, solving and developing policy proposals for problems through the use of the R program.	

### 5. ATTACHED BIBLIOGRAPHY

- *Suggested bibliography:*  
Coletsos, I., Stoggianis, D., Introduction to Operational research, Edition 2st, 2015

Tsantas, N., Vasileiou P.X., Introduction to Operational research, Edition 1st, 2000

Hamdy, T.A., Introduction to Operational research, Edition 10st, 2017

Kounetas, K. Chatzistamoulou, N., Introduction to Operational research and Linear Programming. Solution using R. Edition 1st 2016 (<https://repository.kallipos.gr/handle/11419/5699>)

*-Journals:*

<https://www.journals.elsevier.com/european-journal-of-operational-research/>

<https://www.journals.elsevier.com/journal-of-operations-management/>

<http://emeraldgroupublishing.com/ijopm.htm>

[http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1937-5956](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1937-5956)

## REGIONAL ECONOMICS

### COURSE OUTLINE

#### 1. GENERAL

1. GENERAL			
SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	ECONOMICS		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECO 361	SEMESTER OF STUDIES	6 <sup>th</sup>
COURSE TITLE	REGIONAL ECONOMICS		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures		3	6
COURSE TYPE	Field of Economic Science		
PREREQUISITE COURSES:	Suggested prerequisites: Principles of Economics I, Microeconomics I and II.		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBPAGE (URL)	<a href="https://eclass.upatras.gr/courses/ECON1214/">https://eclass.upatras.gr/courses/ECON1214/</a>		

#### 2. LEARNING OUTCOMES

<b>Learning outcomes</b> <i>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.</i>
<p>Upon successful completion of the course, students will have proven knowledge and understanding of issues related to:</p> <ul style="list-style-type: none"> <li>• the regional economy and the regional level of economic activity</li> <li>• the impact of economic policy on the regions</li> <li>• the concepts of convergence, divergence and regional growth</li> <li>• methods in regional economics and in particular for analyzing the impact of economic activity on the regional economy</li> <li>• the impact of innovation and R &amp; D on regional development</li> </ul> <p>This knowledge is supported by advanced scientific textbooks and includes views arising from modern cutting-edge developments, such as the regional convergence process and social accounting matrices methodology.</p> <p>Students should also be able:</p> <ul style="list-style-type: none"> <li>• to use the above knowledge to approach regional development issues (sectoral or economy-wide) including the use of regional development incentives in the private and public sectors</li> <li>• to gather and interpret regional policy data and regional or urban indicators from the European and national databases and in particular the Eurostat and use these data to shape critique that includes reflection on sustainable development issues in the regions and on strengthening local benefits.</li> <li>• to be able to communicate information, ideas, problems and solutions of regional issues to the aware and knowledgeable public and also express the complex concepts of regional economic policy and the assessment of regional differences to a general audience.</li> </ul>
<b>General Competences</b> <i>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?</i>
<p>At the end of the course, the students should fully understand the functioning of the regions as autonomous administrative units as well as functional units of a single national economy.</p>



In addition, the course aims at:

- Increasing the abilities to search, analyze and synthesize regional data and information.
- Understanding the adaptations required by the changing urban landscape.
- Modifying the decision-making process to incorporate sustainable regional development.
- Understanding the international environment of globalization.
- Enhancing interdisciplinary and teamwork.
- Embedding professional and ethical responsibility.

### 3. COURSE CONTENT

Regional Economics: Introduction. Concept and types of regions. Regional Income and Employment Determination, Export Base Model, Keynesian Model, Regional Multiplier, Regional Multiplier Applications, Econometric Regional Models. Regional Input-Output Models, Input-Output Method, Product and Income Multipliers, Input-Output Applications. Neoclassical Models of Regional Development Inequalities. Regional Export Orientation Models. Interregional Migration, Classic Model of Labor Migration, Alternative Migration Models, Economic Impacts of Immigration.

Quantitative Methods of Regional Analysis: Regional Data. Various types of regional data, Organization of regional data, Regional data acquisition, Presentation of regional data. Descriptive Regional Data Analysis, Central Measures, Dispersion Measures, (Gini, Gini-Hirschman, Theil, Williamson, R), Lorenz Curve, Regional Concentration, Share, Interdependence, Specialization, Concentration Coefficients. Share factors (Location Quotient expressions), Entry factor, export base and export orientation templates, Specialization factor, Spatial Interdependence Coefficient. Shift-Share Analysis. Regional Demographic Models.

Urban Economics: The spatial structure of the urban economy. Concentration and clusters of activities. Globalization: cities, regions and economic policy. Modern analysis of urban and regional economic policy.

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of e-class for storing education material and communicating with students.	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	39 hours (3x13)
	Non-guided study	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<ol style="list-style-type: none"> <li>1. End of semester final written exam and optional participation to mid-term written exams.</li> <li>2. Mid-term exams (two written exams) count for 40% of the final grade.</li> </ol>	

### 5. ATTACHED BIBLIOGRAPHY

- *Suggested bibliography:*

- *Books (in Greek):*

McCann, P. 2016. Αστική και περιφερειακή οικονομική. Εκδόσεις Κριτική. Κωδικός βιβλίου στον Εύδοξο 59367874.

Κουρλιούρος, Η. 2016. Διαδρομές στις θεωρίες του χώρου. Η οικονομική γεωγραφία της παραγωγικής αναδιάρθρωσης και της άνισης ανάπτυξης. Εκδόσεις Προπομπός.

Πετράκος, Γ. και Ψυχάρης, Γ. 2016. Περιφερειακή ανάπτυξη στην Ελλάδα. Εκδόσεις Κριτική.

Κωδικός στον Εύδοξο 59367800.

-Journals:

Journal of Urban Economics, Journal of Regional Science, Regional Studies, Urban Studies, European Urban and Regional Studies, European Planning Studies.

## LABOUR RELATIONS

### COURSE OUTLINE

#### 1. GENERAL

1. GENERAL		ECONOMICS & BUSINESS	
SCHOOL		ECONOMICS	
DEPARTMENT		ECONOMICS	
LEVEL OF COURSE		UNDERGRADUATE	
COURSE CODE		ECO 394	SEMESTER OF STUDIES 6 <sup>th</sup>
COURSE TITLE		LABOUR RELATIONS	
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures & tutorials		3(lect.), 1(tut.)	6
COURSE TYPE		Field of Science, General Knowledge	
PREREQUISITE COURSES:		No	
TEACHING AND ASSESSMENT LANGUAGE:		Greek	
THE COURSE IS OFFERED TO ERASMUS STUDENTS		No	
COURSE WEBPAGE (URL)		<a href="http://eclass.upatras.gr/courses/ECON1286">http://eclass.upatras.gr/courses/ECON1286</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.*

After successful completion of the course, students are expected to:

- Become familiar with the labour-market regulatory framework.
- Have knowledge of the relationships that develop in the labour market, as well as workers' rights.
- Be able to analyze and evaluate Court rulings on issues of Labour law.

##### General Competences

*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 and compilation of information
- Decision making
- Working in an international environment
- Working in an interdisciplinary environment
- Demonstration of social, professional and moral responsibility and sensitivity to gender issues
- Promote free, creative and inductive thinking

#### 3. COURSE CONTENT

Introduction. Employment Contract. The Obligation of the Employer-Employee. Trade Unions. Collective Labour Agreements. Restructuring of Companies and Employment Rights. Workers' participation in Corporate Governance. Labour Mobility in the European Market.

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

<b>TEACHING METHOD</b>	Face to face lectures & tutorials	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of IT in teaching, and in communication with the students (e-class).	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures, 3 hours per week	13X3 = 39 hours
	Tutorials, 1 hour per week	13X1 = 13 hours
	Reading at home	98 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<u>Assessment:</u> (a) End of semester final written exam (70%) (b) Course work (30%)	

#### 5. ATTACHED BIBLIOGRAPHY

- *Suggested bibliography:*

- *In Greek:*

"Εισαγωγή στο Εργατικό Δίκαιο", Π. Αγαλλοπούλου, Εκδ. Σακούλα, Θεσσαλονίκη

"Εργατικό Δίκαιο", Ι. Κουκίδας, Εκδ. Σακούλα, Θεσσαλονίκη

"Ατομικό Εργατικό Δίκαιο, Ατομικές Εργασιακές Σχέσεις και το Δίκαιο της Ευελιξίας της Εργασίας, Ι. Κουκίδα, Εκδ. Σακούλα, Θεσσαλονίκη

- *In English:*

"EU Employment Law", C. Barnard, Oxford University Press, UK.

- *Related Journals:*

International Journal of Comparative Labour Law & Industrial Relations

European Labour Law Review

## SPECIAL TOPICS IN MACROECONOMICS

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 492	<b>SEMESTER OF STUDIES</b>	6 <sup>th</sup>
<b>COURSE TITLE</b>	SPECIAL TOPICS IN MACROECONOMICS		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>	Economics Science		
<b>PREREQUISITE COURSES:</b>	Suggested prerequisites: Macroeconomics I & II		

<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://www.econ.upatras.gr/el/undergraduate/courses/eidika-themata-makrooikonomikis">https://www.econ.upatras.gr/el/undergraduate/courses/eidika-themata-makrooikonomikis</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.*

The aim of this course is to help the students bridge the gap between the theoretical macroeconomics literature and real-world data and policies. After completion of this course, the students:

- Will be familiar with the key issues in the modern macroeconomics literature
- Will have developed an understanding of the controversies surrounding policy choices and of how policies and institutions interact at the macroeconomic level
- Will be able to recognize the main global economic problems
- Will be able to understand the key economic-policy issues in the European Union
- Will be able to interpret and evaluate the results of the corresponding empirical literature

### General Competences

*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 and compilation of data and information using the necessary technology
- Adapt to new situations
- Autonomous work, team work
- Decision making
- Working in an international environment
- Production of new research ideas
- Promote free, creative and inductive thinking

## 3. COURSE CONTENT

Dynamics in aggregate demand & supply, employment and unemployment. Inflation & rational expectations. Time inconsistency in public decision-making. Growth policies. Globalization, currency markets, financial crises. The public sector in the global economy. Macroeconomic policy-games. International macroeconomic interdependence & policy coordination. European economic-policy issues. Applications with real-world data.

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of IT in teaching, and in communication with the students (e-class)	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures.	13X3 = 39 hours
	Reading at home	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>

<b>STUDENT ASSESSEMENT</b>	(a) Written exam at the end of the semester (65%) (b) Project (applications with real-world data) 35%
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## 5. ATTACHED BIBLIOGRAPHY

- *Suggested bibliography:*

[A.Bénassy-Quéré](#) et al., Economic Policy: Theory & Practice, Oxford University Press, 2018

J. Daniels & D Van Hoose, Global Economic Issues & Policies, Routledge, 2018

M. Gartner, Macroeconomics, Pearson, 2016

K. Hoover, Applied Intermediate Macroeconomics, Cambridge University Press, 2012

B.Heijdra, Foundations of Modern Macroeconomics, Oxford University Press, 2017

-*Related journals:*

Economic Policy, Oxford Economic Papers, Journal of Policy Modeling

## SIMULATION OF BUSINESS PROCESSES

### COURSE OUTLINE

#### 1. GENERAL

1. GENERAL			
SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	BUSINESS ADMINISTRATION		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECO_DE141	SEMESTER OF STUDIES	SIXTH
COURSE TITLE	SIMULATION OF BUSINESS PROCESSES		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures, tutorials and laboratory work		2 (lect.) 2 (lab.)	6
COURSE TYPE	Field of Science		
PREREQUISITE COURSES:	There are no prerequisite courses. It is, however, recommended that students have at least a basic knowledge of Statistics.		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBPAGE (URL)	<a href="https://eclass.upatras.gr/courses/BMA416/">https://eclass.upatras.gr/courses/BMA416/</a>		

#### 2. LEARNING OUTCOMES

##### Learning outcomes

This course covers the modeling and analysis of business systems using computer simulation. The objective of the course is to introduce students to simulation as a modeling tool with emphasis on understanding the structure of a simulation model and implementing it by means of commercially available software (EXTEND). The course also covers the statistical design and analysis of simulation models. These topics include random number generation, input data analysis, statistical analysis of simulation outputs, variance reduction techniques, and design of simulation experiments. A series of laboratory sessions provide students with hands-on experience of designing and implementing simulation models.

At the end of this course the student should be able to:
<ol style="list-style-type: none"> <li>1. Design a simulation model for a particular system under examination.</li> <li>2. Implement the model using commercially available software.</li> <li>3. Design the experiments required in order to study the system under consideration.</li> <li>4. Analyze and interpret the results of the simulation.</li> </ol>
<b>General Abilities</b>
At the end of the course the student will have further developed the following skills/competences:
<ol style="list-style-type: none"> <li>1. Implementation of models using the EXTEND package.</li> <li>2. Statistical analysis of simulation results.</li> <li>3. Reporting and presenting the results.</li> </ol>

### 3. COURSE CONTENT

<ol style="list-style-type: none"> <li>1. The concept of simulation</li> <li>2. Discrete Event Simulation</li> <li>3. Random Numbers</li> <li>4. Business simulation</li> <li>5. Model testing and validation</li> <li>6. Planning and analysis of simulation output</li> <li>7. Applications</li> </ol>
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### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Lectures and laboratory work face to face.	
<b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES</b>	Use of Information and Communication Technologies (ICTs) (e.g. powerpoint) in teaching. The lectures content of the course for each chapter are uploaded on the e-class platform, in the form of a series of pdf files, from where the students can freely download them using a password which is provided to them at the beginning of the course.  Use of specialized Simulation software (EXTEND)	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures (2 contact hours per week x 13 weeks)	26
	Laboratories (2 contact hours per week x 13 weeks) – designing and implementing simulation models	26
	Group assignment related to simulating a realistic system and writing a relevant report	50
	Hours for private study of the student and preparation of home-works	48
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT;</b>	I. Final written exam (40%) which includes: <ul style="list-style-type: none"> <li>- Theoretical questions</li> <li>- Practical exercises</li> </ul> II. Group project (60%) <ul style="list-style-type: none"> <li>- The group project concerns the design and development of a simulation model describing a</li> </ul>	

	<p>realistic system. Students develop the problem gradually, as the required topics are presented in the lectures.</p> <p>The group project is compulsory.</p>
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## 5. RECOMMENDED LITERATURE

1.	Sfakianakis M. «Simulation and Applications», in Greek language only, Patakis Publications, 2001
2.	Prastacos G. «Management Science», in Greek language only, Stamoulis Publications, 2002
3.	Khoshnevis, Bherokh «Simulation of Discrete Systems», translated into Greek, DIAYLOS Publications, 1999
4.	Pidd M. "Computer Simulation in Management Science", 5 <sup>th</sup> Edition, Wiley 2004
5.	Meier R.C., Newell N.T. and Pazer H.L. "Simulation in Business and Economics, Prentice Hall, 1997
6.	Laguna M. "Business Process Modeling, Simulation, and Design", Prentice Hall, 2004
7.	McGarvey B. and Hannon B. "Dynamic Modeling for Business Management: An Introduction (Modeling Dynamic Systems)", Springer, 2004
8.	Winston W. "Simulation Modeling Using @RISK", Duxbury Press, 2000

## LABOUR LAW AND INDUSTRIAL RELATIONS

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	BUSINESS ADMINISTRATION		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO_DE227	<b>SEMESTER OF STUDIES</b>	6 <sup>th</sup>
<b>COURSE TITLE</b>	LABOUR LAW AND INDUSTRIAL RELATIONS		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>	General background, Specialised general knowledge		
<b>PREREQUISITE COURSES:</b>	There are no prerequisite courses.		
<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/BMA552/">https://eclass.upatras.gr/courses/BMA552/</a>		

#### 2. LEARNING OUTCOMES

<b>Learning outcomes</b>



By the end of this course the student will furthermore be able to understand:
1. General concepts of labour law and employment relations
2. The definition of individual labour contract
3. The principal conditions of formation of the individual labour contract
4. The duties and rights of the parties
5. The remuneration systems
6. The legal conditions of termination of the individual labour contract- control of the employer's right to terminate the contract unilaterally
7. The protection of the trade union freedom
8. The protection of the right of strike
<b>General Abilities</b>

### 3. COURSE CONTENT

1. Introduction - the general background- definitions and notions – sources of labour law - the principle of equality of men and women
2. The individual labour contract- definition – fundamental elements of appreciation – distinction from other types of contracts of civil law
3. Duties of the parties in the course of the employment relationship- working time limits – overtime pay- the duty of the employee to follow the employer's instructions
4. Working time and leave- annual vacation – holidays- types of leave
5. Remuneration- types of remuneration – wage- allowances
6. The termination of the individual labour contract - conditions of employer's right to terminate the contract
7. Collective labour relations- the trade unions- collective bargaining - Collective labour contracts- formation- content
8. The right of strike- - conditions –sanctions.

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD.</b>	Lectures	
<b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES</b>	Communication with students using the campus LMS (eclass)	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	50
	Exercises	25
	Private study	75
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours</b>
<b>STUDENT ASSESSEMENT</b>	Final exam with developing questions	

### 5. RECOMMENDED LITERATURE (in Greek)

I. Κουκιάδης, Εργατικό Δίκαιο Επιομή, 6η εκδ. Σάκκουλας, 2017
Π. Αγαλλοπούλου, Εισαγωγή στο Εργατικό Δίκαιο, 4η εκδ., Σάκκουλας, 2014
X. Τσενέ, σημειώσεις μαθήματος E-class.

## FOURTH YEAR, 7<sup>th</sup> Semester (Fall)

### INTERNATIONAL TRADE THEORY & POLICY

#### COURSE OUTLINE

##### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 430	<b>SEMESTER OF STUDIES</b>	7 <sup>th</sup>
<b>COURSE TITLE</b>	INTERNATIONAL TRADE THEORY & POLICY		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures and Tutorials		3 (lect.), 1 (tut.)	6
<b>COURSE TYPE</b>	Basic Economic Science		
<b>PREREQUISITE COURSES:</b>	Suggested prerequisites: Introduction to Economics I and II, Microeconomics I and II.		
<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/ECON1221/">https://eclass.upatras.gr/courses/ECON1221/</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.*

Upon successful completion of the course, students will have proven knowledge and understanding of issues related to:

- The theory of international trade
- The impact of international trade on prosperity and income
- The international movements of factors of production, and especially of labour and immigration
- Tariff and non-tariff barriers to trade
- The impact of globalization and international trade in goods on national economies

This knowledge is supported by advanced scientific textbooks and includes views arising from modern cutting-edge developments such as non-tariff measures (NTMs), trade agreements and trade zones.

Students should also be able:

- to use the above knowledge to approach issues of international trade and exploit either incentives or barriers to trade in the private and public sectors.
- to gather and interpret international trade data from the World Trade Organization, European and National Databases, and especially from the Eurostat and the relevant United Nations agencies and divisions, and use this data to shape judgments that include reflection on the development of international trade and the widening and depth of trade
- to communicate information, ideas, problems and solutions to trade in goods, capital movements through multinational companies and foreign direct investment to specialized audiences but also to express the complex concepts of international trade and commercial economic policy to the general public

<ul style="list-style-type: none"> <li>• to develop skills needed to continue in further studies with a high degree of autonomy</li> </ul>
<b>General Competences</b> <i>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?</i>
<p>At the end of the course the students should fully understand the functioning of international trade in goods and services, international movements of production factors and trade policy. In addition, the course aims at:</p> <ul style="list-style-type: none"> <li>• Developing skills in the search, analysis and synthesis of commercial data and information</li> <li>• Analyzing adjustments to the economic framework brought by globalization</li> <li>• Integrating into the decision-making process the international trade</li> <li>• Enhancing the knowledge of the international environment of globalization</li> <li>• Embedding professional and ethical responsibility.</li> </ul>

### 3. COURSE CONTENT

<p>International trade – Introduction: International trade in economic science, international trade and international economics, the international trade of Greece and of European Union. Theory of International Trade: The Ricardian model, labor productivity and comparative advantage. The Heckscher - Ohlin model: resources and international trade. The Neoclassical Model Template of International Trade: Terms of Trade and Welfare - Export and Import Oriented Growth - International Transfers of Income - Effect of Tariffs and Export Subsidies on Trade Terms - The Stolper - Samuelson Theorem - Rybczynski Theorem - Offer Curves. The pattern of intra-industry trade. Economies of scale, incomplete competition, product diversification and international trade. International movement of factors of production. International Trade Policy: Trade Policies, analytical framework of partial and general equilibrium - "small" and "big" country - measuring the benefits and losses of commercial policy. Method of application and cost / benefit of the main trade policies: tariffs - export subsidies - quotas - voluntary export restrictions - other trade policy instruments. The political economy of trade policy: arguments for and against international trade - international negotiations - preferential trade agreements - free trade areas.</p>
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### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face-to-Face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of e-class for storing education material and communicating with students.	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	39 hours (3x13)
	Tutorials	13 hours (1x13)
	Individual study	98 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	The overall course grade is the sum of a) the final exam grade plus b) 20 percent of the mid-term exam grade**	

### 5. ATTACHED BIBLIOGRAPHY

<p>-Books (in Greek):</p> <p>Krugman Paul, Obstfeld Maurice, Melitz Marc. 2016. Διεθνής οικονομική. Εκδόσεις Κριτική, Κωδικός Εύδοξος: 59367851</p> <p>Dominick Salvatore. 2017. Διεθνής Οικονομική, Εκδόσεις Τζιόλα. Κωδικός Εύδοξος: 59383046.</p> <p>Feenstra Robert, Taylor Alan. 2012 Διεθνής Οικονομική. Εκδόσεις Επίκεντρο, Κωδικός Εύδοξος:</p>
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\*\* The above student evaluation method is a pilot one and will be re-examined at the end of academic year 2018-2019.

22767614.

Bernard Guillochon, Annie Kawecki, Baptiste Venet 2015. Διεθνής Οικονομική. Εκδόσεις Προπομπός Κωδικός Εύδοξος: 41955148

-Journals:

Journal of International Economics, World Economy.

## DEVELOPMENT ECONOMICS

### COURSE OUTLINE

#### 1. GENERAL

1. GENERAL			
SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	ECONOMICS		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECO 410	SEMESTER OF STUDIES	7 <sup>th</sup>
COURSE TITLE	DEVELOPMENT ECONOMICS		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures		3	6
COURSE TYPE	Field of Science		
PREREQUISITE COURSES:	Suggested prerequisites: Macroeconomics I, Macroeconomics II, Microeconomics II		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	Offered to ERASMUS through lectures and exams in English		
COURSE WEBPAGE (URL)	<a href="https://www.econ.upatras.gr/en/undergraduate/courses/development-economics">https://www.econ.upatras.gr/en/undergraduate/courses/development-economics</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.*

At the end of this course, students will be able to:

- Identify and analyze the basic theories and concepts related to economic development.
- Critically examine the links between the various economic development theories and approaches.
- Be fully aware and critically analyze the major economic development problems at the international level.
- Summarize and evaluate empirical work on economic development.
- Compare and contrast empirical work on the design of policies for a particular economic development issue.
- Critically analyze how economic development theories affect the practical application of development policies in a variety of local and international contexts.

##### General Competences

*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?*

- Autonomous (independent) work
- Search, analyze and synthesize data and information, also using the necessary technologies
- Decision making
- Adapt to new situations
- Work in an international environment
- Production of new research ideas
- Promoting free, creative and inductive thinking
- Respect for diversity and multiculturalism

### 3. COURSE CONTENT

Economic Growth and economic development: Basic concepts and definitions. Characteristics of the developing world. Theories of economic growth and development. Modern models of economic growth and underdevelopment. Poverty, inequality and development. Population growth and economic development. Human capital and development. Agricultural transformation. Structural transformation and development. Development policy design. External financing, investment and aid. The School of New Structural Economics. Development and Policy in Developing Countries (Structuralist Macroeconomics School).

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of ICT in teaching and communication with students through the e-class platform	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	39 hours (3X13)
	Private study	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	I. Final written test based on multiple-choice questions (100%). II. Optional written scientific essay, based on the quality of which, the grade of the written final test can be increased by 1 to 4 points.	

### 5. ATTACHED BIBLIOGRAPHY

*-Suggested bibliography:*

Todaro M. P. and Smith S. C. 2014. Economic Development. Pearson (12<sup>th</sup> Edition).

Taylor E. J. and Lybbert T. J. 2016. Essentials of Development Economics. University of California Press.

Gillis M., Perkins D. H., Roemer M. and Snodgrass D. R. 2011. Economics of Development. Norton.

*-Indicative Additional Literature:*

World Bank (various years). World Development Report. Washington DC, The World Bank.

Our World in Data: <https://ourworldindata.org>

United Nations. 2015. Transforming our World: The 2030 Agenda for Sustainable Development. New York, United Nations.

Lin, J.Y. 2012. New Structural Economics. Washington DC, The World Bank.

Ocampo, J.A., Rada, C. and Taylor, L. 2009. Growth and Policy in Developing Countries: A Structuralist Approach. New York, Columbia University Press.

Rodrik, D. 2013. The Past, Present, and Future of Economic Growth. Global Citizens Foundation,

#### Working Paper 1.

Chen, S. and Ravallion, M. 2010. The Developing World is Poorer than we Thought, but no less Successful in the Fight against Poverty. The Quarterly Journal of Economics, 125(4).

#### -Relevant scientific journals:

World Development; Journal of Development Economics; Journal of Peasant Studies; The Journal of Development Studies; Development and Change; The World Bank Economic Review; Journal of International Development; Development Policy Review

#### -Relevant web sites:

The World Bank: <http://www.worldbank.org> <http://www.worldbank.org/en/research>

United Nations: [www.un.org/millenniumgoals/global.shtml](http://www.un.org/millenniumgoals/global.shtml)  
<http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

OECD Development Centre: <http://www.oecd.org/dev/>

Food and Agriculture Organization of the United Nations: <http://www.fao.org/home/en/>

International Fund for Agricultural Development: <https://www.ifad.org>

Paul Romer website: <https://paulromer.net>

United Nations University World Institute for Development Economics Research (UNU-WIDER):  
<https://www.wider.unu.edu>

The International Food Policy Research Institute (IFPRI): <http://www.ifpri.org>

The Economist: <https://www.economist.com>

## DATA ANALYSIS

### COURSE OUTLINE

#### 1. GENERAL

SCHOOL		ECONOMICS & BUSINESS	
DEPARTMENT		ECONOMICS	
LEVEL OF COURSE		UNDERGRADUATE	
COURSE CODE		ECO 351	SEMESTER OF STUDIES 7 <sup>th</sup>
COURSE TITLE		DATA ANALYSIS	
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures and Laboratory work		3(lect.), 1(Lab.)	6
COURSE TYPE		Field of Science, Skills Development	
PREREQUISITE COURSES:		Indicative prerequisite: Statistics I & II, Introduction to Information Systems & Applications	
TEACHING AND ASSESSMENT LANGUAGE:		Greek	
THE COURSE IS OFFERED TO ERASMUS STUDENTS		No	
COURSE WEBPAGE (URL)		<a href="https://eclass.upatras.gr/courses/ECON1260/">https://eclass.upatras.gr/courses/ECON1260/</a>	

#### 2. LEARNING OUTCOMES

<b>Learning outcomes</b> <i>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.</i>
<p>The aim of the course is to enable students to expand and deepen their knowledge and skills in various areas of statistics and of statistical analysis of large data sets.</p> <p>After completing the course the student will:</p> <ul style="list-style-type: none"> <li>• Have a solid knowledge of statistical methodologies and techniques for analysing large data sets.</li> <li>• Be able to process and describe the information contained in large data sets.</li> <li>• Have an in-depth understanding of the mechanisms that justify the choice of one method over another.</li> <li>• Be able to select and use the basic statistical data analysis tools using the SPSS statistical software.</li> <li>• Be able to interpret correctly the software graphs and results.</li> <li>• Solve problems with real-world data by using an interdisciplinary approach.</li> </ul>
<b>General Competences</b> <i>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?</i>
<ul style="list-style-type: none"> <li>• Practical application of knowledge</li> <li>• Data and information search, analysis and synthesis, using the appropriate technologies</li> <li>• Autonomous work</li> <li>• Team work</li> <li>• Work in an interdisciplinary environment</li> <li>• Promotion of free, creative and inductive thinking</li> </ul>

### 3. COURSE CONTENT

<ul style="list-style-type: none"> <li>• Towards a Philosophy of Data Analysis.</li> <li>• Data management, data sources, sample and population, measurement and nature of variables, coding, data entry and data cleaning, extreme values, missing values.</li> <li>• Univariate and bivariate statistical analysis – Constructing Graphical Displays - Contingency tables – Correlation – Hypothesis tests - Analysis of Variance – Non parametric procedures.</li> <li>• Multivariate techniques for data analysis and applications in economics.</li> <li>• Distinction (reducing, clustering, interaction) of data analysis methods - Factor analysis – Cluster analysis.</li> <li>• Overview of SPSS – Using SPSS to analyze large sets of real data.</li> </ul>
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### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>• Use of e-class to support teaching, laboratory work and communication with students.</li> <li>• Use of SPSS Statistical software.</li> </ul>	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	(3 x 13=) 39 hours
	Laboratory work	(1 x 13=) 13 hours
	Self-study and project preparation	98 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<ul style="list-style-type: none"> <li>• Written exam at the end of the semester</li> <li>• Project (it is optional and count for 60% of the final grade)</li> </ul>	



## 5. ATTACHED BIBLIOGRAPHY

### *Suggested bibliography:*

- Γναρδέλλης, X., 2013, Ανάλυση δεδομένων με το IBM SPSS STATISTICS 21, ΕΚΔΟΣΕΙΣ ΠΑΠΑΖΗΣΗ (in Greek)
- Field, Andy, 5th edition February 2018, Discovering Statistics Using SPSS, SAGE Publications
- SPSS Help system
- Keller, G. 2018, Statistics for Management and Economics, 11th Edition, CENGAGE
- Kanji, Gopal, 2006, 100 Statistical Tests, SAGE Publications
- Electronic Statistics Textbook, 2013, Tulsa, OK: StatSoft. WEB: <http://www.statsoft.com/textbook/>

### *Data bases:*

<http://ec.europa.eu/eurostat/data/database>

<https://www.gesis.org/eurobarometer-data-service/search-data-access/data-access>

<http://www.statistics.gr/statistics/>

## ECONOMICS OF NATURAL RESOURCES & ENVIRONMENT

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 360	<b>SEMESTER OF STUDIES</b>	7 <sup>th</sup>
<b>COURSE TITLE</b>	ECONOMICS OF NATURAL RESOURCES & ENVIRONMENT		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>	Field of Economics		
<b>PREREQUISITE COURSES:</b>	Suggested prerequisites: Principles of Economics I & II, Microeconomics I & II		
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>	Greek		
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>	No		
<b>COURSE WEBPAGE (URL)</b>	Platform for Asynchronous Teaching e-class: <a href="https://eclass.upatras.gr/courses/ECON1210/">https://eclass.upatras.gr/courses/ECON1210/</a> Open Courses (webinars): <a href="https://eclass.upatras.gr/courses/ECON1322/">https://eclass.upatras.gr/courses/ECON1322/</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.*

Upon successful completion of the course, students will have proven knowledge and understanding of issues related to:

- the economic function of natural resources
- the impact of economic activity on environmental resources
- the economic impacts of climate change
- the management of water and soil resources
- ecosystem services and their integration into national accounts

This knowledge is supported by advanced scientific textbooks and includes views arising from modern developments at the cutting edge of their cognitive field such as climate change and ecosystem services.

Based on acquired knowledge and skills, students will be able to:

- approach issues of management and exploitation of natural resources and the environment in the private and public sectors by supporting arguments for solving environmental problems.
- gather and interpret elements of environmental policy and environmental and economic indicators from the European and National databases and, in particular, the European Environment Agency and the European Statistical Office (Eurostat). Use these data to shape judgements that include reflection on sustainable development, corporate responsibility, and environmental awareness.
- communicate information, ideas, problems and solutions of environmental issues to expert audiences but also to express the complex concepts of economic environmental management and valuation to the general public
- acquire knowledge that they need to continue in further studies with a high degree of autonomy.

### **General Competences**

*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?*

The course aims to embed and enhance:

- a full understanding of the economic function of natural and environmental resources
- searching, analyzing and compiling data and information,
- an understanding of adjustments to the economic thinking framework
- an understanding of the decision-making process
- the knowledge of the problems of the international environment
- interdisciplinary and teamwork for the approach of socially acceptable solutions
- employing professional and ethical responsibility

### **3. COURSE CONTENT**

**Introductory Concepts:** The environment and natural resources in economic thinking. Environmental issues today. Examples of predictions of the environmental situation and the economy.

**Theoretical Framework:** Economic concept of natural resources, classifications of natural resources. Static and dynamic efficiency. Property rights, external economies. Purchasing structures. Information and uncertainty. Cost-Benefit Analysis. Contingent valuation and travel costs.

**Economics of Natural Resources:** Exhaustible non - renewable natural resources. Energy resources. The energy market in Greece. Recyclable natural resources. Recycling in Greece and the European Union. Renewable natural resources: Forests, fishing and other renewable resources.

**Environmental Economics:** Pollution and contamination. Theoretical microeconomic models of external and pollution. Taxes and subsidies for anti-pollution and de-pollution. Tradable pollution permits. Environmental policy in the European Union and Greece.

Special Topics: Climate change. Impacts and projections. Climate change economy. The Kyoto mechanisms. Greenhouse Gas Emissions (GHGE) and global allocation mechanisms. Ecosystem services, physical capital and habitats. Mapping and Economic Evaluation of Ecosystem Services. Physical Capital and National Accounts - Main Framework-2012. Water policy in the European Union. Valuation and pricing of water services. Surface and groundwater, coastal natural resources.

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

<b>TEACHING METHOD</b>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Webinars, and use of asynchronous educational platform e-class for storing education material and communicating with students.	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	39 hours (3x13)
	Individual study and webinars	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<ol style="list-style-type: none"> <li>1. End of semester final written exam and optional participation in mid-term written exams.</li> <li>2. Mid-term exams (two written exams) count for 40% of the final grade.</li> </ol>	

#### 5. ATTACHED BIBLIOGRAPHY

- *Suggested bibliography:*

- *Books:*

Tietenberg Tom, Lewis Lynne. 2010. Οικονομική Περιβάλλοντος και Φυσικών Πόρων.

Gutenberg (978-960-01-1337-2). Κωδικός Βιβλίου στον Εύδοξο: 32269

Κωνσταντίνος Μπίθας 2010. Οικονομική Περιβάλλοντος και Φυσικών Πόρων. Ερευνητικό Πανεπιστημιακό Ινστιτούτο Αστικού Περιβάλλοντος και Ανθρώπινου Δυναμικού. Κωδικός Βιβλίου στον Εύδοξο: 2855.

Faucheux Sylvie, Noel Jean – Francois. 2007. Οικονομική των φυσικών πόρων και του περιβάλλοντος. Gutenberg (978-960-01-1136-1). Κωδικός Βιβλίου στον Εύδοξο: 31904

Γ. Χάλκος, 2016. Οικονομική Φυσικών Πόρων Και Περιβάλλοντος. ISBN 978-960-9495-84-4. Εκδόσεις ΔΙΣΙΓΜΑ. Σελίδες 816.

- *Journals:*

Journal of Environmental Economics and Management, Ecological Economics, Land Economics, Journal of Environmental Management

## ECONOMICS OF INNOVATION & TECHNOLOGY

### COURSE OUTLINE

#### 1. GENERAL

1. GENERAL			
SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	ECONOMICS		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECO 441	SEMESTER OF STUDIES	7 <sup>th</sup>
COURSE TITLE	ECONOMICS OF INNOVATION & TECHNOLOGY		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures and tutorials		3 (lect.) 1(tutotiral)	6
COURSE TYPE	Field of Science		

<b>PREREQUISITE COURSES:</b>	Suggested prerequisites: Economic Geography
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>	Greek
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>	
<b>COURSE WEBPAGE (URL)</b>	<a href="http://www.econ.upatras.gr/en/undergraduate/courses/economics-technology-and-innovation">http://www.econ.upatras.gr/en/undergraduate/courses/economics-technology-and-innovation</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.*

By the end of the course it is expected that the students will have developed adequate knowledge of:

- The key concepts and theories of innovation and technical change (from the classical Schumpeterian approaches to the contemporary “systems of innovation” and “knowledge economy” approaches).
- The spatial dimensions of technological innovations: innovative networks and clusters, regional systems of innovation, innovative and learning regions, science cities.
- The spatial policies for innovation in the EE (technopoles and technopolises, science and technology parks, incubators, BICs, RTP, RIS, RIS+, PITTS programs etc.), the spatial policies for innovation in contemporary Greece, as well as the basic framework for the organization and planning of spaces for the location of innovative economic activities (especially science & technology parks).

### General Competences

*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?*

- Team work
- Planning and management of works
- Respect to the natural (and built) environment
- Promotion of free, creative and inductive thinking

## 3. COURSE CONTENT

Technology, technical change, patterns of technical change. The notion of technology: from the linear Schumpeterian model to the innovation systems approach. Technological innovation and knowledge. Diffusion of innovations, technology transfer, technology barriers. Spatial dimensions: innovative business networks and clusters, regional systems of innovation, innovative and learning regions. Spatial policies for innovation in the EU and Greece. Basic framework for the organization and planning of innovation spaces (particularly science and technology parks).

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>• Use of PowerPoint during lectures</li> <li>• Lecturing notes are uploaded in e-class in the form of pdf files, which the enrolled students can freely download</li> <li>• Bibliographical material (scientific articles and book chapters) in pdf files, is regularly uploaded in e-class, which the enrolled students can freely download</li> <li>• Various information and announcements concerning the course are regularly uploaded in e-class</li> <li>• Distant communication with students (when needed) takes place via e-mail</li> </ul>	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>

	Lectures (3 hours/week x 13 weeks)	39 hours
	Tutorials (1 hour/week x 13 weeks)	13 hours
	Independent study (including the study necessary for the assignments)	98 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<p>The students' assessment is based upon: (1) written exams at the end of the semester (60% of the final course grade) and (2) group assignments/written essays that each student group must present and discuss in the class (40% of the final course grade)*. The above percentages may change depending on the level of difficulty of the assignments.</p> <p>[* In order for the assignment grade to "count" in the final course grade, the student should get at least the grade 5.0 in the final written exam].</p> <p>The evaluation criteria are presented orally during the introductory course lecture and are clearly defined in the "course guide" which is uploaded in e-class (and is therefore easily assessable to the enrolled students). In the e-class the students can also find a "guide for successful work presentation" in which the relating guidelines and criteria are clearly defined.</p>	

## 5. ATTACHED BIBLIOGRAPHY

### -Προτεινόμενη βιβλιογραφία

Swann, G.M.P. (2009) The Economics of Innovation: An introduction. Cheltenham: Edward Elgar.

Κομνηνός Ν. (1993) Τεχνοπόλεις και Στρατηγικές Ανάπτυξης στην Ευρώπη. Αθήνα: Gutenberg.

### -Πρόσθετη βιβλιογραφία (ενδεικτική)

Cooke, Ph., Parrilli, M.D., & Curbelo, J.L., eds. (2012) Innovation, global change and territorial resilience. Cheltenham: Edward Elgar.

Breschi, S., Malerba, F., eds., (2005) Clusters, networks and innovation. Oxford: Oxford University Press.

Κομνηνός Ν. (2000) Η καινοτομία είναι νησί: οι Ευρωπαϊκές διαστάσεις μιας παγκόσμιας πρόκλησης. Στο Ανδρικοπούλου Ε., Καυκαλάς Γρ. (επιμ.) Ο νέος Ευρωπαϊκός χώρος: Η διεύρυνση και η γεωγραφία της Ευρωπαϊκής ανάπτυξης. Αθήνα: Θεμέλιο.

Κομνηνός, Ν. (2007) Περιφερειακοί Πόλοι Καινοτομίας στην Ελλάδα 2001-2009: Σχεδιασμός εστιασμένων συστημάτων καινοτομίας. Αειχώρος, Τ. 6(2), σ. 10-33.

Σεφερτζή, Ε. (2004) Χωρικές πολιτικές καινοτομίας στην Ευρώπη: νέες κατευθύνσεις και προγράμματα χωρικής ανάπτυξης. Στο Καυκαλάς Γρ. (επιμ.) Ζητήματα χωρικής ανάπτυξης: Θεωρητικές προσεγγίσεις και πολιτικές. Αθήνα: Κριτική.

## RESEARCH METHODOLOGY IN ECONOMICS

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 452	<b>SEMESTER OF</b>	7 <sup>th</sup>

		STUDIES	
COURSE TITLE	RESEARCH METHODOLOGY IN ECONOMICS		
INDEPENDENTTEACHINGACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures		3	6
COURSE TYPE	Field of Science, Skills Development		
PREREQUISITE COURSES:	Suggested prerequisites: Macroeconomics I & II and Microeconomics I & II		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBPAGE (URL)	<a href="https://www.econ.upatras.gr/en/undergraduate/courses/research-methodology-economics">https://www.econ.upatras.gr/en/undergraduate/courses/research-methodology-economics</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.*

This course deals with issues pertinent to the scientific research in economics, providing the principles for organizing, planning, designing and conducting research. More specifically, the course provides knowledge on: the use of bibliographic reviews, use of data sources, ethics of economic research, overall design of a research project (objectives, philosophy, and methods), evaluation of existing research, and, finally, the compilation and dissemination of the findings. The students discuss and present papers, learn research methods and write a critical review of the literature on an economic topic of their choice.

By the end of this course, the students are expected to:

#### 1) Knowledge:

- Know how to search for research papers and scholarly journal articles.
- Know how to evaluate information found in the web.
- Know how to analyze critically the research of others
- Understand the different approaches to empirical economic research (social experiments, field experiments, laboratory experiments, natural experiments)
- Be aware that research in economics is a continuous learning process.

#### 2) Skills:

- Demonstrate comprehensive knowledge and understanding of all stages of the research process, including the important links between its various components
- Critically appraise the philosophical and ethical issues relating to research in economics
- Identify and analyze primary and secondary data sources
- Synthesize the relevant literature, explaining how the theories have been tested
- Be able to design a research project and communicate the findings

#### 3) Specific skills:

- Have gained experience at presenting the research work of others, individually and as part of a team
- Have gained experience at writing a critical review of the literature.

**General Competences**

*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?*

By the end of this course, the students will have developed the following skills:

- 1) Ability to expand their knowledge and make this knowledge useful to the study of world economic problems
- 2) Ability of 'learning- by-doing' under the supervision of a researcher or other expert
- 3) Ability to pull together various aspects of economic theories, methods and analysis and present them in a coherent, logical, reliable and useful manner.

More generally, by the end of this course, the student will have develop the following abilities (from the list above):

- Search, analysis and synthesis of facts and information, using the necessary technologies
- Adaptation to new situations
- Decision making
- Autonomous (Independent) work
- Group work
- Exercise of criticism and self-criticism
- Promotion of free, creative and inductive thinking
- Respect to natural environment
- Work design and management

**3. COURSE CONTENT**

- 1) The status and evolution of economic knowledge
- 2) Ethics of economic research
- 3) Literature reviews, skills and resources
- 4) Accessing economic data sources
- 5) Essay writing skills in economics
- 6) Reading and reviewing an article
- 7) Econometrics skill- training
- 8) Software presentation and application
- 9) Starting research and writing a dissertation

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

<b>TEACHINGMETHOD</b>	Face to face lectures & seminars	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of Information and Communication Technologies (ICTs) (e.g. PowerPoint) in teaching.	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures, 3 hours per week	13X3 = 39 hours
	Private study and preparation of assignments	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMNT</b>	<ol style="list-style-type: none"> <li>1) Written examination at the end of the semester (80%)</li> <li>2) Assignment during the semester (20%).</li> </ol>	

**5. ATTACHED BIBLIOGRAPHY**

- *Suggested bibliography:*

Methodology in Economics, Karagianis A.D., Kritiki, 1st Edition, 2001.

-*Additional literature:*

Research Methodology in Applied Economics, Ethridge, 2004, 2nd edition



John Creedy (2008), Research Without Tears: From the First Ideas to Published Output, Edward Elgar, Cheltenham, UK.

Methodology in Economic and Social sciences. Drakopoulos, S, Gotsis, G and Grimani, K. Hellenic Academic Books, 1st Edition, 2016.

## MATHEMATICAL ECONOMICS

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 450	<b>SEMESTER OF STUDIES</b>	7 <sup>th</sup>
<b>COURSE TITLE</b>	MATHEMATICAL ECONOMICS		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>	Field of Science (Economics)		
<b>PREREQUISITE COURSES:</b>	Suggested prerequisites: Microeconomics I & II, Mathematics for Economists I & II		
<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://www.econ.upatras.gr/en/undergraduate/courses/mathematical-economics">https://www.econ.upatras.gr/en/undergraduate/courses/mathematical-economics</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.*

By the end of this course the student will be able to:

- Use efficiently the basic mathematical methods used in economic analysis and modeling.
- Model and analyze the most common research problems of economics and their dual i.e.: maximization of the utility function of the consumer and firm's profits.
- Model the effect of time on the research problems in economics.
- Understand the connection between mathematical modeling and econometric modeling.

##### General Competences

*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?*

Decision making

- Working in multidisciplinary environment
- Generation of new research ideas
- Promotion of free, creative and inductive thinking

#### 3. COURSE CONTENT

(A) Introduction: Minima / maxima of functions, total differentials, quadratic forms, the Hessian matrix, the envelope theorem, comparative static analysis.

(B1) Classical programming: optimization subject to equality constraints. The Lagrange method: economic interpretation and comparative static analysis. Applications in economics: utility maximization, expenditure minimization, cost minimization.

(B2) Nonlinear programming: optimization subject to inequality constraints. Kuhn-Tucker (K-T) conditions. The K-T conditions as necessary and sufficient conditions. Applications in Economics: “corner” solutions in the utility maximization problem, generalized conditions for cost minimization and profit maximization.

(C) Dynamic Programming: differential equations, difference equations, the Phase-Diagram technique. Local stability analysis. Introduction to Dynamic Programming.

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

<b>TEACHING METHOD</b>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of ICTs in teaching (PowerPoint) and communication with students (e-class).	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures, 3 hours per week	(3x13) 39 hours
	Study at home	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	Written examination at the end of the semester (100%)	

#### 5. ATTACHED BIBLIOGRAPHY

*- Suggested Literature:*

Chiang A.C., Wainwright K. (2009). Mathematical Methods of Economic Analysis. 2nd Edition. Kritiki Publications. Athens. (Chiang A.C., Wainwright K. (2009). Μαθηματικές Μέθοδοι Οικονομικής Ανάλυσης. 2η Έκδοση. Εκδόσεις Κριτική. Αθήνα.)

Hoy M., Livernois J., McKenna C., Stengos T., Kiritsis I. (ed.). (2012). Mathematics for Economics. 1st Edition. G. Dardanos. Athens. (Hoy M., Livernois J., McKenna C., Stengos T., Κυρίτσης Ι. (επιμ.). (2012). Μαθηματικά Οικονομικών Επιστημών. 1η Έκδοση. Γ. Δαρδάνος και ΣΙΑ. Αθήνα.)

Xepapadeas A.P., Giannikos I.X. (2009). Mathematical Methods in Economics. 1st Edition. G. Dardanos – K. Dardanos. Athens. (in Greek only) (Ξεπαπαδέας Α.Π., Γιαννίκος Ι.Χ. (2009). Μαθηματικές Μέθοδοι στα Οικονομικά. 1η Έκδοση. Γ. Δαρδάνος – Κ. Δαρδάνος ΟΕ. Αθήνα.)

Tsoufidis L. (1999). Mathematics of Economic Analysis. 2nd Edition. G. Dardanos – K. Dardanos. Athens. (in Greek only) (Τσουφίδης Λ. (1999). Μαθηματικά Οικονομικής Ανάλυσης. 2η Έκδοση. Γ. Δαρδάνος – Κ. Δαρδάνος ΟΕ. Αθήνα.)

*-Additional Literature (indicative):*

Dowling E.T. (2011). Introduction to Mathematical Economics. 3rd Edition. McGraw-Hill Education.

Wisniewski M. (2013). Mathematics for Economics: An integrated approach. 3rd Edition. Palgrave Macmillan.

Sydsaeter K., Hammond P. (2016). Essential Mathematics for Economic Analysis. 5th Edition. Pearson.

Sydsaeter K., Hammond P., Seierstad A., Strom A. (2008). Further Mathematics for Economic Analysis. 2nd Edition. Pearson.

Hoy M., Livernois J. (2012). Student Solutions Manual for Mathematics for Economics. 3rd Edition. The MIT Press.

Anthony M., Biggs N. (1996). Mathematics for Economics and Finance: Methods and Modelling. 1st Edition. Cambridge University Press.

*-Relative Economic Journals:*

American Economic Review, Quarterly Journal of Economics, Journal of Political Economy, Review of Economics and Statistics, Economic Journal

*-Relative Websites:*

Mathematics for Economics, 3rd edition: <https://mitpress.mit.edu/books/mathematics-economics>

## AGRICULTURAL ECONOMIC POLICY

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 465	<b>SEMESTER OF STUDIES</b>	7 <sup>th</sup>
<b>COURSE TITLE</b>	AGRICULTURAL ECONOMIC POLICY		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>	Field of Science and Skills Development		
<b>PREREQUISITE COURSES:</b>	Suggested Prerequisites: Microeconomics I and II		
<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/modules/document/?course=ECON1335">https://eclass.upatras.gr/modules/document/?course=ECON1335</a>		

#### 2. LEARNING OUTCOMES

<p><b>Learning outcomes</b></p> <p><i>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.</i></p> <p>This course applies the basic analytical tools of Microeconomics to a) the markets of agricultural products and b) the analysis of agricultural policies. The course content aims at introducing the students to a) the special characteristics of agricultural products concerning, demand and production/supply, b) the markets of agricultural inputs and c) the basic principles of agricultural policy. By the end of this course the students will have sufficient knowledge and understanding of the major issues concerning the so called “agricultural problem”. They will be able to express themselves in a professional manner on issues concerning agriculture, to use efficiently the acquired knowledge and understanding in order to support their view on specific aspects of agricultural policy, to employ the acquired tools of economic analysis in the process of agricultural policy evaluation (e.g., CAP). Furthermore, given the large number of available statistical data bases concerning agriculture, the students will be able to perform basic statistical and econometric analysis and thus provide empirical evidence on the issues that they investigate.</p>
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**General Competences**

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?

- Decision making
- Independent work
- Search, analysis and synthesis of facts and information
- Advancement of independent, creative and inductive thinking

**3. COURSE CONTENT**

The “agricultural problem” and the basic structural characteristics of the agricultural sector. Characteristics of agricultural products and food. Analysis, estimation and special aspects of the demand for agricultural products. Food, food shortages and nutrition. Analysis, estimation and special aspects of the supply of agricultural products. Various market structures of agricultural products. Marketing of agricultural products. The demand for factors of production. Supply of labor, employment and pluriactivity of farmers. Agricultural land: demand, supply and economic rents. Agricultural policy and welfare analysis. Analysis of alternative interventions in agricultural markets. The basic characteristics of the new CAP. Agriculture and economic development. Greek agriculture: basic statistics and statistical data bases.

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

<b>TEACHING METHOD</b>	Face to face class lectures	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Support of the learning process through the e-class platform	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Class lectures and seminars	3*13 = 39 hours
	Study at home	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	Student evaluation is conducted through a written (final) multiple choice exam (40 questions with five alternative answers) which covers the entire course content. Successful completion of the course requires at least 20 correct answers. A sample test and information regarding the nature of the exam can be found at the e-class course page, which is accessible by all students.	

**5. ATTACHED BIBLIOGRAPHY**

- *Suggested bibliography:*

“Agricultural Economics: Theory and Policy”, T. Lianos, D. Damianos, G. Mergos, M. Demoussis and S. Katranidis. E. Benos Publishers, 2nd edition, Athens, 1998

“Agricultural Policy”, P. Spathis, K. Papageorgiou, D. Damianos. Stamoulis Publishers, 2nd edition, Athens 2015

**CORPORATE STRATEGY I****COURSE OUTLINE****1. GENERAL**

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	BUSINESS ADMINISTRATION		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO_DE413	<b>SEMESTER OF</b>	7 <sup>th</sup>

		STUDIES	
COURSE TITLE	CORPORATE STRATEGY I		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures, seminars, case studies		3	6
COURSE TYPE	Skills & Knowledge Development		
PREREQUISITE COURSES:			
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	NO		
COURSE WEBPAGE (URL)	<a href="https://eclass.upatras.gr/modules/document/?course=BMA507">https://eclass.upatras.gr/modules/document/?course=BMA507</a>		

## 2. LEARNING OUTCOMES

### Learning outcomes

This course builds a foundation of knowledge on the broad understanding of strategy and strategic management. Students are introduced to what strategy is, and how it develops in contemporary organizations. They are also introduced to the criteria of a successful strategy and how to assess if a chosen strategy fits to the environment/industry and offers to the organization sustainable advantage. Porter's generic strategies are presented and discussed in relevant case-studies along with the most common growth strategies.

At the end of this course the student should be able to:

- Understand what is strategy and strategic thinking
- Become familiar with the factors which drive sustainable performance and the modes of strategic -making.
- Get familiar with the strategic analysis of the external and internal environment of an organization.
- Be able to identify and critique the generic strategies followed by different types of organizations.

At the end of the course the student will have further developed the following skills/competences:

- To define strategic issues and employ theory to critically analyze them.
- To identify corporate-level, business-level and functional strategies in organizations.
- To analyze the nature of competition in an industry and identify factors which contribute to its attractiveness.
- To apply theoretical frameworks to assess an organization's sustainable advantage.
- To analyze how an organization differentiates itself and its products
- To appraise the trade-offs for an organization on how far to integrate and diversify

<b>General Abilities</b>
<i>Decision making</i>
<i>Ability to work independently and in group</i>
<i>Ability to adjust in new settings</i>
<i>Ability to analyze and synthesize evidence and information</i>

### 3. COURSE CONTENT

<ul style="list-style-type: none"> <li>• The basic concepts related to strategy and strategic management, why strategy is important? How strategy happens?</li> <li>• Strategic objectives, different levels of strategy, competitive and corporate strategies.</li> <li>• Analyzing the environment and the nature of competition, the macro-environment.</li> <li>• Assessing the industry competition, industry analysis- the five forces, strategic groups, the industry life-cycle.</li> <li>• Assessing the sustainability of advantage, the value chain analysis the resource-based view, assets, capabilities and competences.</li> <li>• Defining the organization's vision and mission statement, values &amp; belief systems and strategic intent fitting its strategic situation.</li> <li>• Porter's generic competitive strategies.</li> <li>• Strategy implementation and evaluation.</li> </ul>
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### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Lectures, seminars and case studies	
<b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES</b>		
<b>TEACHING ORGANIZATION</b>	<b>Δραστηριότητα</b>	<b>Φόρτος Εργασίας Εξαμήνου</b>
	Lectures	26
	Cases studies and seminars in class	13
	Team assignment on competitive strategies	40
	Hours for private study of the student and preparation of assignments	71
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150</b>
<b>STUDENT ASSESSEMENT</b>	1. Team Assignment with presentation (40%) 2. Final Exam (60%)	

### 5. RECOMMENDED LITERATURE

<ul style="list-style-type: none"> <li>• Haberberg A., &amp; Rieple, A. (2008). Strategic management: Theory &amp; Application Oxford University Press.</li> </ul> <p><b>Additional Readings (indicative)</b></p> <ul style="list-style-type: none"> <li>• Porter, M (1996). What is Strategy? Harvard Business Review. 74(3), November-December, 61-78.</li> <li>• Porter, Michael E. (1987): "From competitive advantage to corporate strategy." <i>Harvard</i></li> </ul>
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*Business Review*, 65(3):43-59

- Bowman, E., & Helfat C. (2001). Does Corporate Strategy Matter?. *Strategic Management Journal*, 22, 1-23.
- Wu, Q., He, Q., Duan, Y., & N. O'Regan (2012). Implementing Dynamic Capabilities for Corporate Strategic Change Toward Sustainability. *Strategic Change*, 21, 231-247.
- Tsoukas, H. and E. Vladimirou (2001). 'What is organisational knowledge?', *Journal of Management Studies* 38(7), pp.974-93.

## FOURTH YEAR, 8<sup>th</sup> Semester (Spring)

### ECONOMICS OF INDUSTRIAL ORGANIZATION

#### COURSE OUTLINE

##### 1. GENERAL

1. GENERAL		ECONOMICS & BUSINESS	
SCHOOL		ECONOMICS	
DEPARTMENT		ECONOMICS	
LEVEL OF COURSE		UNDERGRADUATE	
COURSE CODE		ECO 401	SEMESTER OF STUDIES 8 <sup>th</sup>
COURSE TITLE		ECONOMICS OF INDUSTRIAL ORGANIZATION	
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures		3	6
COURSE TYPE		Field of Science	
SUGGESTED PREREQUISITE COURSES:		Suggested Prerequisites: Microeconomics I, Microeconomics II	
TEACHING AND ASSESSMENT LANGUAGE:		Greek	
THE COURSE IS OFFERED TO ERASMUS STUDENTS		No	
COURSE WEBPAGE (URL)		<a href="https://eclass.upatras.gr/courses/ECON1217/">https://eclass.upatras.gr/courses/ECON1217/</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.*

Upon successful completion of the course students will:

- Understand the core theoretical streams within the field of the Economics of Industrial Organization
- Know the basic measures of market concentration and be able to use appropriate methods for their estimation
- Identify business policies that compose and support business strategies and goals
- Evaluate the determining factors of business performance and growth
- Know the key elements and components of industrial dynamics
- Identify the role of market structure in promoting the entrepreneurial mind
- Analyze how both price and non-price competition between business entities affect economic welfare.
- Analyze and evaluate models of competitive, oligopolistic and monopolistic markets

###### General Competences

*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?

- Ability to apply the knowledge and understanding acquired to the solution of problems related to Industrial Organization, and in particular to business development
- Ability to interact with others in problem solving related to business strategies
- Study skills needed for continuing professional development.

More generally, by the end of this course the student will have developed the following abilities (from the list above):

- Search, analysis and synthesis of facts and information, as well as using the necessary methodological tools
- Decision making
- Autonomous (Independent) work
- Development of criticism and self-criticism competencies
- Promotion of free, creative and inductive thinking

### 3. COURSE CONTENT

- Introduction: Markets and industries taxonomy, The SCP paradigm, the endogeneity issue, Chicago Approach, Loss of social welfare, Firms Objectives, Types of Firms
- Games and Strategy: Dominant Strategies, Dominated Strategies, Nash Equilibrium, Strategic form, Incomplete information, Dynamic games, Trees, Backward solution, solution refinement, repeated games
- Concentration and Market Power, Oligopoly: Bertrand Model, Cournot Oligopoly, Stackelberg model, Model of conjectural variations. Empirical estimation of concentration and market power Static measures of concentration, Dynamic concentration, Basic elements of collusive behavior
- Entry, Exit and Industrial Dynamics: Entry costs and market structure, Endogenous and exogenous entry cost, barriers to entry, static and structural, economies of scale and MES, Economies of Scope, Contestable markets, Mergers and Acquisitions, Routinized and Entrepreneurial Technological regimes, empirics of entry and exit.
- Business Practices-Pricing: Price discrimination of first, second and third order, restrictive entry pricing, predatory pricing, non-linear pricing, vertical relationships, retailers competition, double optimization, investment externalities
- Business Practices – Product differentiation: Chamberlin model, Hotelling model, horizontal and vertical differentiation, Product proliferation, Brand name and customers loyalty
- Business Practices – Advertising: Information, persuasion and marking, advertising intensity, Dorfman-Steiner model, social benefit and advertising cost, convenient and non-convenient goods, Porter's approach and the role of retailers
- Business Practices – R&D and innovation: The Shumpeterian hypotheses, The role of firm size and market structure, Opportunity and appropriability, systems of patents, diffusion models, networks and externalities, market pull and demand push hypotheses
- Business Performance and Growth: Performance measures, measures of structure, SCP econometric models, Gibrat law, extended versions of Gibrat law

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face lectures	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	ICT in teaching and communication with students (e-class)	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	39 hours (3 hours*13 weeks)
	Work at home	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMNT</b>	Written examination at the end of the semester based which includes:	

	<ul style="list-style-type: none"> <li>• Questions of multiple choice type</li> <li>• Questions of short answer type</li> <li>• Comparative evaluation</li> </ul>
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## 5. ATTACHED BIBLIOGRAPHY

### -Suggested bibliography:

Carlton, D. W. and Perloff, J.M. Σύγχρονη Βιομηχανική Οργάνωση, Εκδόσεις Broken Hill Publishers, 2017. Επιμέλεια Μ. Βλάσσης, Ι. Παπαναγιώτου, Κ. Τσεκούρας (μετάφραση του D. Carlton and J. Perloff, Modern Industrial Organization, Pearson/Addison Wesley, Boston, 2005).

Cabral, Luis. Βιομηχανική Οργάνωση. Εκδόσεις Κριτική, Αθήνα, 2003. Επιμέλεια Ε. Λουρή-Δενδρινού (μετάφραση του L. Cabral, Introduction to Industrial Organization, MIT Press, Cambridge, 2000).

Waldman, Don, E. και Jensen, Elizabeth. Βιομηχανική Οργάνωση - Θεωρία και Πράξη. Εκδόσεις Έλλην, Αθήνα, 2006. Επιμέλεια Ι. Χασιδ και Ε. Φαφαλιού (μετάφραση από το Waldman, Don, E. και Jensen, Elizabeth, Industrial Organization – Theory and Practice, Addison Wesley Longman Inc./Pearson, NY, 2001).

- e-class: (<http://eclass.upatras.gr/courses/ECON1217/>)

- Some advanced issues are examined in (in English): Church. J. and Ware, R., (2000). "Industrial Organization: A Strategic Approach", McGraw-Hill, Boston.

-Related Scientific Journals: Journal of Industrial Economics; International Journal of Industrial Organization; Review of Industrial Organization

## LABOUR ECONOMICS

### COURSE OUTLINE

#### 1. GENERAL

1. GENERAL			
SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	ECONOMICS		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECO 420	SEMESTER OF STUDIES	8 <sup>th</sup>
COURSE TITLE	LABOUR ECONOMICS		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures and tutorials		3	6
COURSE TYPE	Field of Science		
PREREQUISITE COURSES:	Suggested prerequisites: Microeconomics I and II, Macroeconomics I and II, and Econometrics		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	Yes (in English)		
COURSE WEBPAGE (URL)	<a href="https://eclass.upatras.gr/courses/ECON1277/">https://eclass.upatras.gr/courses/ECON1277/</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.

Upon successful completion of the course the student will be able to:

<ul style="list-style-type: none"> <li>• Understand the process of wage formation through the interaction of supply and demand forces in the labor market.</li> <li>• Analyze the impact of factors that are shaped into imperfect labor markets as well as various government policies on wages and incentives to work.</li> <li>• Understand the implications of the various political and economic factors in wage setting and employment</li> <li>• Separate the analysis between issues related to the economic analysis of the labor market and those concerning existing labor relations.</li> <li>• Recognize the value of the interdisciplinary approach as economic science is essentially a field that uses key analytical tools from mathematics, philosophy, psychology, history, and political science.</li> <li>• Develop critical thinking skills in assessing competitive ideas and approaches using various methods of addressing relevant issues.</li> <li>• Develop complex writing and presentation skills for a research work on various topics of interest within the classroom.</li> </ul>
<b>General Competences</b> <i>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?</i>
<ul style="list-style-type: none"> <li>• Search, analyze and synthesize data and information, using the necessary technologies</li> <li>• Adapt to new situations</li> <li>• Decision making</li> <li>• Autonomous work</li> <li>• Teamwork</li> <li>• Working in an international environment</li> <li>• Respect for diversity and multiculturalism</li> <li>• Demonstrate social, professional and ethical responsibility and gender awareness</li> <li>• Exercise of criticism and self-criticism</li> <li>• Promote free, creative and inductive thinking</li> </ul>

### 3. COURSE CONTENT

<ul style="list-style-type: none"> <li>• Introduction and Overview of the Labor Market</li> <li>• Labor Demand and Elasticities</li> <li>• Frictions in the Labor Market</li> <li>• Labor Supply</li> <li>• Compensating Wage Differentials</li> <li>• Human Capital</li> <li>• Labor Mobility</li> <li>• Pay and Productivity</li> <li>• Labor Market Discrimination</li> <li>• Trade Unions and Labor Market</li> <li>• Unemployment</li> <li>• Earnings Inequality and Income</li> <li>• International Trade and Labor Market</li> </ul>
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### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face-to-face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of Information and Communication Technologies (ICTs) (e.g. power point) in teaching. The lectures for each chapter are uploaded on the e-class platform in the form of ppt files, which the enrolled students can freely download.	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures (3 hours per week x 13 weeks)	39 hours
	Tutorials (2 hours per week x 13 weeks)	26 hours
	Individual work	85 hours
	<b>Total number of hours for the</b>	<b>150 hours (total)</b>

	Course (25 hours of work-load per ECTS credit)	student work-load)
<b>STUDENT ASSESSEMENT</b>	The assessment is based on student's performance in the written final examination (80%) and on a mid-term examination during the semester (20%). Written examinations deal with issues of understanding basic concepts, comparative evaluation of competitive theories, and solving numerical problems related to the content of the course. The test is of a multiple-choice format, and students are asked to choose the correct answer (40 questions) from a list of 5 alternative answers (per question). The evaluation criteria are described in the Course Syllabus, which is posted on the platform e-class upatras.	

## 5. ATTACHED BIBLIOGRAPHY

### - Required textbook

Ehrenberg, Ronald G., and Robert S. Smith. Modern Labor Economics: Theory and public policy. Routledge, 2016.

Borjas, George J. Labor Economics. McGraw-Hill, 6th edition, 2013.

### - Related Journals

Journal of Labor Economics, Labour Economics, Journal of Human Resources, Industrial and Labor Relations Review, Journal of Labor Research, LABOUR: Review of Labour Economics and Industrial Relations, International Journal of Manpower

## INVESTMENT APPRAISAL

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 330	<b>SEMESTER OF STUDIES</b>	8 <sup>th</sup>
<b>COURSE TITLE</b>			
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>	Field of Science		
<b>PREREQUISITE COURSES:</b>	Suggested Prerequisites: Microeconomics I and II		
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>	Greek		
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>	Yes (in English)		
<b>COURSE WEBPAGE (URL)</b>	<a href="https://eclass.upatras.gr/modules/document/?course=ECON1363">https://eclass.upatras.gr/modules/document/?course=ECON1363</a>		

#### 2. LEARNING OUTCOMES

##### Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will

<i>acquire with the successful completion of the course are described.</i>
The course aims at describing the main framework of investment, financing, and payout decisions in corporations. Students should understand the main techniques and methods used to evaluate an investment, as well the financing choices involved, and the optimal capital structure. The payout decision is also discussed. The course offers a sound theoretical background and also a practical applied approach, involving numerous problem sets and a group work assignment for students to deal with.
<b>General Competences</b> <i>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?</i>
By the end of this course the student will have developed the following skills (general abilities): <ul style="list-style-type: none"> <li>• Search, analyze and synthesize data and information, using the necessary technologies</li> <li>• Adapt to new situations</li> <li>• Decision making</li> <li>• Autonomous (Independent) work</li> <li>• Group work (project)</li> <li>• Working in an international environment</li> </ul>

### 3. COURSE CONTENT

<p>The course starts with some preliminary notions of corporate investment and financing. The course then focuses on capital budgeting and traditional financial performance measures such as the NPV or the IRR, revising the concept of Free cash flow, as well as robustness checks, such as scenario analysis. This is followed by a careful discussion of the basic financing choices and the theory of capital structure, starting from the Modigliani-Miller framework, discussing the trade-off theory, and also dynamic concerns. The main valuation methods used in real life situations, such as WACC, APV or FTE, are also applied.</p> <p>COURSE OUTLINE:</p> <ul style="list-style-type: none"> <li>• Foundations of Net Present Value</li> <li>• Valuing Riskless Cashflows</li> <li>• Investment Decisions using NPV</li> <li>• Alternatives to NPV</li> <li>• Market Efficiency</li> <li>• Cost of Capital</li> <li>• Optimal Debt Policy</li> <li>• Dividend Policy</li> </ul>
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### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face lectures	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of IT in teaching, and in communicating with students (e-class).	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures, 3 hours per week	13X3 = 39 hours
	Study at home	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	<p>Assessment:</p> <p>(a) Submission of a group-project (30%)</p> <p>(b) written final examination (70%).</p> <p>The evaluation criteria are clearly defined and posted in the relevant web page of the course:  <a href="https://eclass.upatras.gr/modules/auth/opencourses.php?fc=62">https://eclass.upatras.gr/modules/auth/opencourses.php?fc=62</a> </p>	

## 5. ATTACHED BIBLIOGRAPHY

### - Recommended Literature:

Any widely accepted Corporate Finance textbook is accepted and covers reasonably well the course content. A sample would be:

Berk and DeMarzo, Corporate Finance, 2nd ed., Pearson, 2011.

Brealey, Myers, and Allen, Principles of Corporate Finance, 8th ed., McGraw-Hill

Damodaran, Corporate Finance, 2nd ed., Wiley

### -Additional Literature:

Hillier, Ross, Westerfield, Jaffe & Jordan, Corporate Finance, European Edition, McGrawHill

Ross, Westerfield, Jaffe and Jordan, Corporate Finance, 8th edition, Mc-Graw Hill

## ECONOMICS OF EDUCATION

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>		ECONOMICS & BUSINESS	
<b>DEPARTMENT</b>		ECONOMICS	
<b>LEVEL OF COURSE</b>		UNDERGRADUATE	
<b>COURSE CODE</b>	ECO 396	<b>SEMESTER OF STUDIES</b>	8 <sup>th</sup>
<b>COURSE TITLE</b>	ECONOMICS OF EDUCATION		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>	Field of Science		
<b>PREREQUISITE COURSES:</b>	Suggested prerequisites: Microeconomics I and II, Macroeconomics I and II, and Econometrics		
<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/ECON1262/">https://eclass.upatras.gr/courses/ECON1262/</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.*

Upon successful completion of the course the student will be able to:

- Understand the process by which individuals shape their education choices through the interaction of the supply and demand forces that affect their choices.
- Understand and identify the differences between human capital and signaling theory.
- Understand within the framework of the economic analysis the shaping of educational outcomes.
- Understand the methods used in economic science for evaluating educational policies and the implications of the various political and economic institutional factors in the educational outcome.
- Separate analytical issues between those relating to the economic analysis of education from the purely pedagogical content of the educational process.

<ul style="list-style-type: none"> <li>• Collect and organize the relevant empirical data needed to estimate the returns to schooling and recognize the role of externalities.</li> <li>• Understand the determinants of the educational outcome at different levels of education.</li> <li>• Recognize the role of accountability in education and understand models of school administration.</li> <li>• Recognize the value of the multidisciplinary approach to the economics of education.</li> <li>• Develop critical thinking skills in assessing competing ideas and approaches using various methods to address relevant problems.</li> <li>• Develop complex writing and presentation skills for a research work on various topics of interest within the classroom.</li> </ul>
<b>General Competences</b> <i>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?</i>
<ul style="list-style-type: none"> <li>• Search, analyze and synthesize data and information, using the necessary technologies</li> <li>• Adapt to new situations</li> <li>• Decision making</li> <li>• Autonomous work</li> <li>• Working in an international environment</li> <li>• Respect for diversity and multiculturalism</li> <li>• Demonstrate social, professional and ethical responsibility and gender awareness</li> <li>• Exercise of criticism and self-criticism</li> <li>• Promote free, creative and inductive thinking</li> </ul>

### 3. COURSE CONTENT

<ul style="list-style-type: none"> <li>• The role of education in economic science</li> <li>• Demand for schooling</li> <li>• Human Capital Theory</li> <li>• Education as a signal</li> <li>• Estimating the returns to schooling</li> <li>• Class size and peer effects</li> <li>• The labor market for teachers and teacher performance</li> <li>• Financing education</li> <li>• School choice and accountability</li> <li>• Tertiary education</li> <li>• Skill formation (cognitive and non-cognitive skills)</li> <li>• Intergeneration mobility</li> <li>• Externalities of education (crime, health, institutions)</li> </ul>
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### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face-to-face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of Information and Communication Technologies (ICTs) (e.g. power point) in teaching. The lectures for each chapter are uploaded on the e-class platform in the form of ppt files, which the enrolled students can freely download.	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures (3 hours per week x 13 weeks)	39 hours
	Individual work	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	The assessment is based on student's performance in the written final examination (80%), on a paper presentation during the semester (10%), and on a mid-term examination	



	during the semester (10%). The content of written examinations deals with issues of understanding basic concepts, comparative evaluation of competitive theories and solving numerical problems related to the content of the course. The test is of a multiple-choice format and students are asked to choose the correct answer (40 questions) from a list of 5 alternative answers (per question). The evaluation criteria are described in the Course Syllabus, which is posted on the platform e-class upatras.
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## 5. ATTACHED BIBLIOGRAPHY

### - Required textbook:

Giannakopoulos, N., M. Demoussis (2015) «Economics of Education», Hellenic Academic Libraries Link «Kallipos», ISBN: 978-960-603-336-0. (In Greek)

Psacharopoulos, G. (1999). Economics of Education. Athens: Papazisi (In Greek)

Papageorgiou, P., Hadzidima, S. (2003). Introduction to Economics of Human Resources and Education. Athens: Stamoulis (In Greek)

### - Related Journals:

Journal of Human Capital, Journal of Human Resources, Economics of Education Review, Education Economics

## APPLIED ECONOMETRICS

### COURSE OUTLINE

#### 1. GENERAL

1. GENERAL			
SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	ECONOMICS		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECO 421	SEMESTER OF STUDIES	8 <sup>th</sup>
COURSE TITLE	APPLIED ECONOMETRICS		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures (Computer Lab)		3	6
COURSE TYPE	Scientific Area, Skills Development		
PREREQUISITE COURSES:	Suggested prerequisites: Mathematics for Economists I, Mathematics for Economists II, Statistics I, Statistics II, Principles of Economics I, Principles of Economics II, Econometrics		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	Yes (in English)		
COURSE WEBPAGE (URL)	<a href="https://eclass.upatras.gr/courses/ECON1336/">https://eclass.upatras.gr/courses/ECON1336/</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.*

The main objective of the course is to connect the theoretical econometric concepts and models that the students are taught in the Econometrics course, with the practical application and analysis of econometric methods and models in a manner similar to that applied by the empirical researchers-economists. Students are familiarized with the basic tools of economists to quantify, measure and analyze economic data, relationships and phenomena using the econometric package gretl.

The course will analyze and process data from real economic data bases, as well as the use of appropriate econometric models, depending on the nature of the data (spatial data, chronological data, combination of two, etc.), to answer classic economic questions.

At the end of the course the students are expected to have a complete knowledge of the classical tools and techniques of the applied economic analysis and in addition to have developed the following skills:

- Computer skills - use of specialized open-source econometric software
- Communication skills - Ability to communicate the results of their analyzes with the presentation of papers.

### **General Competences**

*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, analyze and synthesize data and information, using the necessary technologies
- Decision making
- Autonomous Work
- Teamwork
- Working in an international environment
- Working in an interdisciplinary environment
- Production of new research ideas
- Promote free, creative and inductive thinking

### **3. COURSE CONTENT**

In summary, the material to be covered - always at a practical level using as a main empirical tool the econometric software “gretl” - is the following:

Simple Linear Regression:

- estimation (least squares)
- coefficient interpretation (slope coefficient estimates)
- coefficient of determination
- testing statistical significance
- regression standard error
- forecasting
- functional formats and interpretations of estimated coefficients

Multiple Linear Regression Model:

- estimation, interpretation of partial slope coefficients
- coefficient of determination and adjusted coefficient of determination
- general linear framework of hypothesis testing (joint statistical significance etc using the F-statistic)
- partitioned regression, omission of relevant variables - introduction of unnecessary variables, direct, indirect and total effect, multicollinearity.
- Issues of heteroskedasticity and autocorrelation
- Introduction to Econometric analysis using time series data

Finally, practical application using gretl will be based on all three possibilities offered by the software:

1. applications using the menu
2. applications using the console

3. applications using script files (introduction to programming)

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

<b>TEACHING METHOD</b>	Face to face lectures	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>• Support Learning through the e-class platform</li> <li>• Learning and using the open-source program “gretl” for practice on all the taught techniques and the presentation of economic results</li> </ul>	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures (3 hours per week x 13 weeks)	39 hours
	Hours for private study and preparation of home-works	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	Written final exam in Greek Optional individual enhancement grade projects that include comprehension exercises in the course modules (compulsory use of gretl)	

#### 5. ATTACHED BIBLIOGRAPHY

*- Suggested bibliography:*

- Introduction to econometrics, Book Code in Eudoxus: 68390822, Edition: 2nd ed. / 2011, Authors: Wooldridge J, ISBN: 978-960-02-2586-0, Publisher: A.PAPAZISIS PUBLICATIONS
- Applied Econometrics, Book Code in Eudoxus: 22684908, Edition: 1/2010, Authors: TSIONAS EFTHYMOS, ISBN: 978-960-9443-02-9, Owner (Publisher): Athens University Of Economics & Business

*-Other Greek-language bibliography:*

- Introduction to Econometrics, Eudoxus Book code: 50660777, Version: 2/2015, Authors: VENETIS IOANNIS, ISBN: 9789609427517, Type: Textbook, Owner (Publisher): GKOTSIS KON / NOS

*-Other Foreign language bibliography:*

- Cristian Heij, Paul de Boer, Philip Hans Franses, Teun Kloek, Herman K. van Dijk, Econometric Methods with Applications in Business and Economics. Issue 1, ISBN-13: 978-0199268016, Oxford University Press

*-Useful Internet Addresses:*

<http://gretl.sourceforge.net/>  
<http://www.learneconometrics.com/gretl/index.html>

*-Related scientific journals:*

Journal of Econometrics,  
 Journal of Applied Econometrics

## DATABASE SYSTEMS

### COURSE OUTLINE

## 1. GENERAL

1. GENERAL		ECONOMICS & BUSINESS	
DEPARTMENT		ECONOMICS	
LEVEL OF COURSE		UNDERGRADUATE	
COURSE CODE	ECO 424	SEMESTER OF STUDIES	8 <sup>th</sup>
COURSE TITLE		DATABASE SYSTEMS	
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures (L) and Lab exercises (LE)		4: 3 (L), 1(LE)	3
COURSE TYPE	Specialized Background, Skill Development		
PREREQUISITE COURSES:	Suggested Prerequisite: Introduction to Information Systems and Applications		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBPAGE (URL)	<a href="http://www.econ.upatras.gr/en/undergraduate/courses/database-systems">http://www.econ.upatras.gr/en/undergraduate/courses/database-systems</a> <a href="https://eclass.upatras.gr/courses/ECON1243/">https://eclass.upatras.gr/courses/ECON1243/</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.*

The course aims at developing capabilities for the use of database systems as data design and data management tools. After successfully completing the course, students will be able to:

- Understand the role and importance of databases in data management issues and in real life applications
- Define the concept of the database and the Database Management System (DBMS)
- Describe the desired characteristics of data
- Utilize the Entity-Relationship and Extended Entity-Relationship models for the design of conceptual data models based on the description of microcosms
- Describe the Relational database model and Relational Database Management Systems (RDBMS)
- Design relational databases based on the conceptual design of microcosms using the relational database model
- Employ the concepts and operators that are supported by the SQL language for defining and manipulating data
- Define the data using the SQL language
- Retrieve data using the SQL language
- Use the RDBMS of MS Access and MySQL to design and implement databases
- Evaluate the design of databases

### General Competences

*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, analyze and aggregate data and information with the use of the proper tools and technologies
- Manage and conduct team projects

## 3. COURSE CONTENT

Definition of database and Database Management System (DBMS), Comparing DBMSs to filesystems of Operating Systems, Advantages of DBMSs, Architecture of DBMSs and levels of abstraction, Data models, Methodology of database design and implementation, The Entity-Relationship conceptual model (Entities, Relationships, Constraints), The Extended Entity Relationship conceptual model (Generalization, Specialization and related constraints), The relational model (relation, relation schema, instances/tuples, relational database schema, Domain constraints, Key constraints, Foreign key constraints, General purpose constraints), Logical database design using the relational model, Relational Algebra, The SQL language, The DDL subset of SQL, The DML subset of SQL, Queries in SQL.

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

<b>TEACHING METHOD</b>	Face-to-face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>Slides and notes to support lectures</li> <li>Software tools for demonstration and practical application purposes: <ul style="list-style-type: none"> <li>Diagram editor tools for the design of Entity-Relationship diagrams (MS Vision, Open source DIA, etc.)</li> <li>RDBMS tools for the implementation of database systems (MS Access, OpenOffice base, etc.)</li> </ul> </li> <li>Use of the E-Learning platform eclass in order to: <ul style="list-style-type: none"> <li>Organize the course material (slides, notes, examples, code snippets etc)</li> <li>Perform weekly online quizzes to evaluate the understanding of the related course material</li> <li>Hand in homeworks</li> <li>Communicate with the students and the class</li> </ul> </li> </ul>	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	3*13=39 hours
	Lab exercises	1*13=13 hours
	Team Project	64 hours
	Individual quizzes, assignments and Self-study	34 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	1. One Team Project on designing and implementing a database using a RDBMS: 30% 2. Final exam: 70%  Evaluation criteria are available to students at eclass <a href="#">here</a> .	

#### 5. ATTACHED BIBLIOGRAPHY

- *Suggested bibliography:*

- *Textbooks:*

Elmasri, R., Navathe, S. B.: Fundamentals of Database Systems, 7th Edition, Pearson, ISBN-13: 978-0133970777, 2017

Silberschatz, A., Korth, H. F., Sudarshan, F.: Database System Concepts, 6th Edition, McGraw-Hill, ISBN-13: 978-0073523323, 2010

Ramakrishnan, R., Gehrke, J.: Database Management Systems, 3rd Edition, McGraw Hill, ISBN-13: 978-0072465631, 2003.

- *Journals:*

ACM Transactions on Database Systems (TODS), <https://dl.acm.org/pub.cfm?id=1777>

Journal on Data and Knowledge Engineering, Elsevier, <https://www.journals.elsevier.com/data-and-knowledge-engineering/>

IEEE Transactions on Knowledge and Data Engineering, <https://www.computer.org/web/tkde>

## PORTFOLIO MANAGEMENT

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 472	<b>SEMESTER OF STUDIES</b>	8 <sup>th</sup>
<b>COURSE TITLE</b>	PORTFOLIO MANAGEMENT		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures		3	6
<b>COURSE TYPE</b>	Field of Science		
<b>PREREQUISITE COURSES:</b>	Suggested Prerequisite: Financial Economics		
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>	Greek		
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>	No		
<b>COURSE WEBPAGE (URL)</b>	<a href="http://www.econ.upatras.gr/en/undergraduate/courses/portofolio-management">http://www.econ.upatras.gr/en/undergraduate/courses/portofolio-management</a>		

#### 2. LEARNING OUTCOMES

<p><b>Learning outcomes</b></p> <p><i>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.</i></p> <p>By the end of this course the student will be able to understand the functions of the investment process with a reference to the notion of risk and return of single assets and its extension to multiple assets when forming a portfolio of assets. Hence, the optimal portfolio selection and portfolio management assessment becomes the core idea of this course.</p> <p>The students will also have the ability to analyze topics such as:</p> <ul style="list-style-type: none"> <li>• Estimation of returns, and systematic and non-systematic risk of a portfolio.</li> <li>• Identification of effective portfolios.</li> <li>• Evaluation of investors' risk/return preferences and formulation of excellent portfolios based on utility theory.</li> <li>• Applying portfolio valuation measures in order to assess portfolio management and performance.</li> <li>• Development of diversification strategies in order to reduce the non-systematic risk and hedge the risk of buying a portfolio.</li> <li>• Forming portfolio management strategy</li> </ul>
<p><b>General Competences</b></p> <p><i>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?</i></p> <p>By the end of this course the student will have developed the following skills:</p> <p>1. Ability to exhibit knowledge and understanding of the essential facts, concepts, theories and applications which are related to Portfolio Management.</p>

2. Ability to apply this knowledge and understanding to the solution of problems related to investment decision making.
3. Ability to prepare and execute multi-step syntheses of investment decisions.
4. Ability to interact with others in finance related issues.

More generally, by the end of this course, the student will have developed the following abilities:

- Search, analysis and synthesis of facts and information, as well as using the necessary technologies
- Adaptation to new situations
- Decision making
- Autonomous (Independent) work
- Group work
- Exercise of criticism and self-criticism
- Promotion of free, creative and inductive thinking
- Work design and management

### 3. COURSE CONTENT

- The Investment Process and the Financial System
- Microeconomic view of investor behavior under uncertainty
- Risk & Return
- Portfolio Theory
- Models of one and multiple indicators
- Capital Market Theory: CAPM & APT Models
- Fundamental Analysis of Shares: DCF Models
- Market Efficiency
- Technical analysis
- Portfolio Management Strategies

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face lectures	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of IT in teaching and communication with students (e-class).	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures, 3 hours per week	13X3 = 39 hours
	Individual study	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	Written final exam	

### 5. ATTACHED BIBLIOGRAPHY

- *Suggested bibliography:*

Frank Reilly and Keith Brown, Analysis of Investments and Management of Portfolios, 2009, 9th Edition, THOMSON, South-Western

Edwin J. Elton, Martin J. Gruber, Stephen J. Brown, William N. Goetzmann. Modern Portfolio Theory and Investment Analysis, 8th Edition, 2010, International Student Version ISBN: 978-0-470-50584.

Brown Keith C. and, Frank K. Reilly, (2015), Analysis of Investment and Management of Portfolios, 11th Edition, South-Western

*Related journals:*

European Corporate Finance, Review of Financial Studies, Journal of Financial and Quantitative



**MONEY AND BANKING****COURSE OUTLINE****1. GENERAL**

1. GENERAL			
SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	ECONOMICS		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECO 482	SEMESTER OF STUDIES	8 <sup>th</sup>
COURSE TITLE	MONEY AND BANKING		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures & tutorials		3(lect.) 1(tut.)	6
COURSE TYPE	Field of Science		
PREREQUISITE COURSES:	Suggested prerequisites: Macroeconomics I &II		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBPAGE (URL)	<a href="http://www.econ.upatras.gr/el/undergraduate/courses/hrima-kai-trapeziki">http://www.econ.upatras.gr/el/undergraduate/courses/hrima-kai-trapeziki</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.*

By the end of this course the student will be able to:

- Think critically and creatively in regards to monetary policy and the role of central banks so as to be able to bring monetary policy into practice through the ability of identifying assumptions, detecting false logic or reasoning and understanding the limitations of generalizations derived from monetary policy theories.
- Solve complex problems in a monetary policy context and use appropriate financial techniques in order to make decisions from various options.
- Understand, develop and use relevant monetary policy models.
- Look at academic research on monetary policy and finance in a critical way either individually or as part of a team.
- Communicate complex monetary and financial information orally and in writing through the effective use of computer information technology

**General Competences**

*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?*

By the end of this course the student will, furthermore, have developed the following skills:

1. Ability to exhibit knowledge and understanding of the essential facts, concepts, theories and applications which are related to Monetary Policy.
2. Ability to apply this knowledge and understanding to the solution of problems related to financial markets and how the Central Banks conduct monetary policy.
3. Ability to prepare and execute multi-step syntheses of policy decisions
4. Ability to interact with others in finance-related issues.

More generally, by the end of this course, the student will have developed the following abilities:

- Search, analysis and synthesis of facts and information, as well as using the necessary technologies
- Adaptation to new situations
- Decision making
- Autonomous (Independent) work
- Group work
- Exercise of criticism and self-criticism
- Promotion of free, creative and inductive thinking
- Work design and management

### 3. COURSE CONTENT

- Introduction to Money and the Financial System
- Money, Payments System, Financial Instruments, Markets and Institutions
- Interest rate setting and interest rate structure
- Contract Theory, Information Asymmetry and interest rate setting
- Exercise of Monetary Policy and the Role of Central Banks
- Money Supply and Monetary Policy Tools.
- Money Demand
- Theory of Monetary Transmission Mechanism
- Financial Innovation, Market Regulation, and Financial Market Efficiency
- Modern Monetary Policy

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD</b>	Face to face lectures & tutorials	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	Use of IT in teaching and in communication with students (e-class)	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures, 3 hours per week	13X3 = 39 hours
	Tutorials, 1 hour per week	13X1 = 13 hours
	Work at home	98 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</b>	Final written exam	

### 5. ATTACHED BIBLIOGRAPHY

- *Suggested bibliography:*

The Economics of Money, Banking & Financial Markets: European Edition, by Frederic S. Mishkin, Kent Matthews and Massimo Giuliodori. 2013 ISBN: 978-0-273-73180-1

Mishkin, F.S, & Eakins, S, 2012, "Financial Markets and Institutions", 7/E. Pearson Prentice Hall

Cecchetti, S.G, & Schoenholtz, K.L, "Money, Banking, and Financial Markets", 3/e. 2011, McGraw-Hill Higher Education

-*Related journals:*

International Review of Finance, Journal of Financial Institutions and Money, Journal of Money, Credit and Banking

## FINANCIAL MANAGEMENT

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	BUSINESS ADMINISTRATION		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	BA_122	<b>SEMESTER OF STUDIES</b>	8 <sup>th</sup>
<b>COURSE TITLE</b>	FINANCIAL MANAGEMENT		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Lectures and seminars		3	6
<b>COURSE TYPE</b>		Background	
<b>PREREQUISITE COURSES:</b>		Typically, there are not prerequisite course. The students should possess knowledge of mathematics, statistics, financial accounting and money markets.	
<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/modules/document/?course=BMA529">https://eclass.upatras.gr/modules/document/?course=BMA529</a>	

#### 2. LEARNING OUTCOMES

<b>Learning outcomes</b>
<p>The aim of the course is to understand the process of management of the firm's resources, including financial decision-making, in order to maximize its value. Business and investment financing decisions, dividend decisions and investment decisions will be analyzed, with ultimate goal the maximization of the market value of the firm and its shareholders. It will present the financing decisions (capital structure of the company in terms of assets and liabilities) and dividend policy decisions. It will also present the context of the markets for business financing decisions (national and international) as well as the regulatory framework and corporate social responsibility rules.</p> <p>By the end of this course the student will be able to</p> <ul style="list-style-type: none"> <li>• Recognize agency problems in a modern private enterprise and propose solutions based on corporate governance systems.</li> <li>• Use cash flow discounting tools in asset pricing.</li> <li>• Calculate the required return of the enterprise under uncertainty.</li> <li>• Evaluate investment projects.</li> <li>• Choose the financial structure of the business that maximizes its value.</li> </ul>
<b>General Abilities</b>
<p>By the end of this course the student will, furthermore, have developed the following skills (general abilities):</p> <ol style="list-style-type: none"> <li>1. Calculate the pricing of assets.</li> <li>2. Estimate the weighted average cost of capital (WACC).</li> <li>3. Evaluate risk and return of investment programs under uncertainty.</li> <li>4. Calculate net present value (NPV), internal rate of return (IRR, MIRR), payback period (PBP).</li> <li>5. Choose the best capital structure.</li> </ol>

### 3. COURSE CONTENT

1. Business Theory and Principles of Corporate Governance.
2. Time value of money.
3. Stock and bond valuation.
4. Capital costs.
5. Capital investment budget.
6. Theory of capital structure.
7. Dividend policy.
8. Management of international risks.

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>TEACHING METHOD.</b>	Lectures face to face.	
<b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES</b>	Powerpoint, eclass.	
<b>TEACHING ORGANIZATION</b>	<b>Δραστηριότητα</b>	<b>Φόρτος Εργασίας Εξαμήνου</b>
	Lectures	26
	Exercises	13
	Hours for private study of the student.	111
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours</b>
<b>STUDENT ASSESMENT</b>	Written final exam including: - Multiple choice questions. - Solving problems using quantitative data. - Comparative evaluation of theory data.	

### 5. RECOMMENDED LITERATURE

1. Brealey R.A., Myers S.C. and Allen F. (2013) «Αρχές Χρηματοοικονομικής των Επιχειρήσεων», Εκδόσεις Utopia.
2. Βασιλείου Δ., Ηρειώτης Ν. (2010) «Χρηματοοικονομική Διοίκηση, Θεωρία και Πρακτική» Εκδόσεις ROSILI.
3. Damodaran A. (2013). «Εφαρμοσμένη Χρηματοοικονομική για επιχειρήσεις» Εκδόσεις Broken Hill Publishers.

## PRINCIPLES OF ECONOMICS FOR ENGINEERS & SCIENTISTS

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 000	<b>SEMESTER OF STUDIES</b>	Fall
<b>COURSE TITLE</b>	PRINCIPLES OF ECONOMICS FOR ENGINEERS & SCIENTISTS		
<b>INDEPENDENT TEACHING ACTIVITIES</b>	<b>TEACHING</b>	<b>ECTS CREDITS</b>	

		HOURS PER WEEK	
Lectures		3	6
<b>COURSE TYPE</b>	General Background		
<b>SUGGESTED PREREQUISITE COURSES:</b>	none		
<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.*

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 Competences

*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?*

- 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>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	ICT in teaching and communication with students (e-class)	
<b>TEACHING ORGANIZATION</b>	<b>Activity</b>	<b>Semester workload</b>
	Lectures	13X3 =39 hours
	Work at home	111 hours
	<b>Total number of hours for the Course (25 hours of work-load per ECTS credit)</b>	<b>150 hours (total student work-load)</b>
<b>STUDENT ASSESSEMENT</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>	

#### 5. ATTACHED BIBLIOGRAPHY

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/>

## INTERNSHIP

### COURSE OUTLINE

#### 1. GENERAL

<b>SCHOOL</b>	ECONOMICS & BUSINESS		
<b>DEPARTMENT</b>	ECONOMICS		
<b>LEVEL OF COURSE</b>	UNDERGRADUATE		
<b>COURSE CODE</b>	ECO 499	<b>SEMESTER OF STUDIES</b>	8 <sup>th</sup>
<b>COURSE TITLE</b>	INTERNSHIP		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
This course is optional, and it concerns an internship program. More information <a href="http://www.econ.upatras.gr/en/undergraduate/Internship">http://www.econ.upatras.gr/en/undergraduate/Internship</a>			3
<b>COURSE TYPE</b>			
<b>PREREQUISITE COURSES:</b>			
<b>TEACHING AND ASSESSMENT LANGUAGE:</b>			
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>	No		
<b>COURSE WEBPAGE (URL)</b>	<a href="http://www.econ.upatras.gr/en/undergraduate/Internship">http://www.econ.upatras.gr/en/undergraduate/Internship</a>		



