

# DEPARTMENT OF ECONOMICS

**UNIVERSITY OF PATRAS** 



Academic Year 2024-2025

**UNDERGRADUATE PROGRAM** 





## **Preface**

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 2024-2025. 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 <a href="www.upatras.gr">www.upatras.gr</a> and <a href="www.econ.upatras.gr">www.econ.upatras.gr</a>, <a href="www.econ.upatras.gr">www.econ.upatras.gr</a> respectively.

Emmanuel Tzagarakis, Associate Professor Acting Head of the Department

September 2024



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## The University of Patras

#### **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 Fisheries & Aquaculture (based in Messolonghi), the Department of Food Science & Technology (based in Agrinio), the Department of Sustainable Agriculture (based in Agrinio), and the Department of Agriculture (based in Messolonghi).
- The *School of Economics & Business* consists of the Department of Business Administration, the Department of Economics, the Department of Management Science & Technology and the Department of Tourism Management, all based in Patras.
- The *School of Engineering* consists of the Department of Architecture, the Department of Chemical Engineering, the Department of Civil Engineering, the Department of Computer Engineering & Informatics, the Department of Electrical & Computer Engineering and the Department of Mechanical Engineering & Aeronautics, all based in Patras.
- The *School of Health Rehabilitation Sciences* consists of the Department of Nursing, the Department of Physiotherapy and the Department of Speech & Language Therapy, all based in Patras.
- The *School of Health Sciences* consists of the Faculty of Medicine and the Department of Pharmacy, all based in Patras.
- The *School of Humanities & Social Sciences* consists of the Department of Educational Science & Early Childhood Education, the Department of Education & Social Work, the Department of History & Archaeology, the Department of Philosophy and the Department Theatre Studies, all 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 wideranging 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 Centers 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 center 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 2024-2025**

FALL SEMESTER	SPRING SEMESTER
Teaching Period: 30/9/2024 -10/1/2025	Teaching Period: 17/2/2025 - 30/5/2025
Examination Period: 20/1/2025 - 7/2/2025	Examination Period: 10/6/2025 - 27/6/2025



## Department of Economics

#### **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 2022-2023, the School of Economics & Business consists of 4 Departments: the Department of Economics, the Department of Business Administration, 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).



Acting Head of the Department of Economics for the academic year 2024-2025 is Emmanuel Tzagarakis, Associate Professor.

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. The new building includes two big and five smaller lecture rooms for undergraduate and postgraduate teaching, four computer laboratories, equipped with all the latest statistical packages and other software, four other smaller lecture rooms and a Departmental Library.

The Department subscribes to all the leading economics journals and to several specialist 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**

- Dimara, Efthalia (Ph.D. 1988, Université Pierre & Marie Curie, Paris VI, France)
   Research Field: Applied Statistics, Data Analysis
- 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
- 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
- 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)

#### Associate Professors

- Filis, George (Ph.D. 2004, Bournemouth University, UK)

  Research Field: International Economics, Financial Economics, Energy Economics,

  Tourism Economics
- Tagkalakis, Athanasios (Ph.D. 2005, European University Institute, Florence, Italy)
   Research Field: Macroeconomics, Fiscal & Monetary Policy, Labour Economics,
   Banking & Finance. Advisor at the Economic Analysis and Research Department of
   the Bank of Greece.
- Tsampra Maria (Ph.D. 2000, University of London, UK) Research Field: Economic Geography and Regional Development
- Tzagarakis, Emmanuel (Ph.D. 2003, University of Patras, Greece) Research Field: Information & Knowledge Management

#### Assistant Professors

- Chatzistamoulou Nikolaos (Ph.D. 2016, University of Patras, Greece) Research Field: Applied Industrial Organization, Efficiency and Productivity Analysis, Energy & Environmental Economics, Economics of Sustainable Development
- Goulas, Eleftherios (Ph.D. 2008, University of Patras, Greece)

  Research Field: Macroeconomics, Economic Development, Financial Economics
- Laliotis Ioannis (Ph.D. 2014, University of Patras, Greece)

  Research Field: Applied Microeconomics, Labor Economics, Health Economics
- Manioudis Emmanouil (Ph.D. 2017, University of Crete, Greece) Research Field: Economic History, History of Economic Thought, Political Economy.
- Papaioannou, Sotirios (Ph.D. 2007, Athens University of Economics and Business, Greece)
  - Research Field: Applied Macroeconomics
- Polymenis, Athanase (Ph.D. 1997, University of Glasgow, UK)
   Research Field: Statistics, Mathematics

• Stavropoulos, Spyridon (Ph.D. 2014, University of Patras, Greece)
Research Field: Regional Economics, Economic Geography, Economics of Happiness,
Applied Microeconomics

#### Other Academic/Teaching Staff

#### Emeritus Professor

- Daouli, Joan (Ph.D. 1981, North Carolina State University, USA) Research Field: Labour Economics, Microeconomics
- Demoussis, Michael (Ph.D. 1981, North Carolina State University, USA) Research Field: Microeconomics, Labour Economics, Applied Econometrics
- Sypsas, Panagiotis (Ph.D. 1983, University of Lancaster, UK), Research Field: Operational Research, Applied Statistics

#### Special Teaching Staff

• Daskalou, Victoria (Ph.D. 1998, Athens University of Economics & Business, Greece) Research Field: Internet Information Systems

#### Retired Members of the Teaching and Research Staff

#### **Professors**

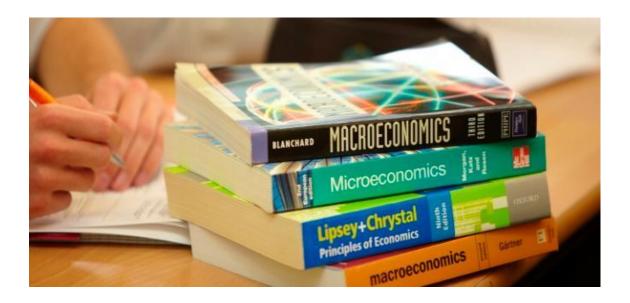
 Kourliouros Elias (PhD. 1995, London School of Economics & Political Science, UK. PhD. 1990, National Technical University of Athens)
 Research Field: Economic Geography and Spatial Planning

#### **Associate Professors**

- Argyros, George (Ph.D. 1994, University of Leicester, UK)
  Research Field: Economic Law, European Internal Market, Labour Relations
- Zervoyianni, Athina (Ph.D. 1989, University of Warwick, UK)
  Research Field: Macroeconomics, International Macroeconomics, European Integration,
  Economic Growth

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)

#### 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 2024-2025, 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 2024-2025



Listed below are the undergraduate courses offered by the Department of Economics in the academic year 2024-2025. 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.

Compulsory Core Courses	Course code
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
Compulsory Foreign Language Courses	Course Code
1. English for Economists I	ECO_E01N
2. English for Economists II	ECO_E02N

Elective Courses	Course Code
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. Computer Assisted Statistics	ECO_222
6. Greek Economic History	ECO_230
7. Economic Geography	ECO_240
8. Issues on Digital Economy	ECO_241
9. Behavioral Economics	ECO_252
10. Financial Economics	ECO_322
11. Investment Appraisal	ECO_330
12. Financial Analysis & Management	ECO_332
13. History of Economic Thought	ECO_340
14. Data Analysis	ECO_351
15. Operational Research	ECO_352
16. Introduction to Game Theory	ECO_353
17. Business Planning	ECO_354
18. Topics of Economic Geography	ECO_356
19. Economics of Natural Resources & the Environment	ECO_360
20. Regional Economics	ECO_361
21. Energy Economics	ECO_393
22. Economics of Education	ECO_396
23. Applied Econometrics	ECO_421
24. Database Systems	ECO_424
25. Economics of Innovation & Technology	ECO_441
26. Mathematical Economics	ECO_450
27. Research Methodology in Economics	ECO_452
28. Agricultural Policy	ECO_465
29. Topics of Regional Development	ECO_466

30. Economics of Entrepreneurship	ECO_471
31. Portfolio Management	ECO_472
32. Health Economics	ECO_473
33. Special Topics on Economics of Strategy	ECO_474
34. Money and Banking	ECO_482
35. Special Topics in Macroeconomics	ECO_492
36. Climate Change Economics	ECO_494
37. Business Administration I	ECO_DE113 Offered by the Department of Business Administration
38. Special Issues of Political Economy	ECO_DE225 Offered by the Department of Business Administration
39. Simulation of Business Processes	ECO_DE141 Offered by the Department of Business Administration
40. Corporate Strategy I	ECO_DE413 Offered by the Department of Business Administration
41. Introduction to Civil & Commercial Law	ECO_DE115 Offered by the Department of Business Administration
42. Business Law	ECO_DE227 Offered by the Department of Business Administration
43. Labour Law & Labour Relations	ECO_DE205 Offered by the Department of Business Administration
44. Placement	ECO_499

Courses offered at other Faculties of the University of Patras	Course Code
1. Principles of Economics for Engineers and Scientists	ECO_000

#### 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, 1st Semester (Fall)

Course Code	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
Total ECTS credits				30
ECO_000	Principles of Economics for Engineers and Scientists	3		6

#### FIRST YEAR, 2nd Semester (Spring)

Course Code	Course Title	Weekly Hours		ECTS Credits
		L	T/L	

ECO_102N ECO_112N	Principles of Economics II  Mathematics for Economists II	4	2	8
ECO_112N ECO_122N	Statistics II	4	2	8
ECO_130	Economic History	3		6
Total ECTS credits				30

### SECOND YEAR, 3rd Semester (Fall)

Course Code	Course Title	Weekly Hours		ECTS Credits
		L	T/L	
ECO_201N	Microeconomics I	4	2	8
ECO_203N	Macroeconomics I	4	2	8
1Ξ01	English for Economists I	3		2
	<u>and 2</u> elective courses chosen from:			
ECO_131	Accounting I	3	2	6
ECO_DE115	Introduction to Civil & Commercial Law	3		6
ECO_154	Introduction to the Greek Economy	3		6
ECO_220	Introduction to Marketing- Management	3		6
ECO_252	Behavioral Economics	3		6
ECO_DE113	Business Administration I	3		6
Total ECTS credits				30

## SECOND YEAR, 4th Semester (Spring)

Course Code	Course Title	Weekly Hours		ECTS Credits
		L	T/L	
ECO_202N	Microeconomics II	4	2	8
ECO_204N	Macroeconomics II	4	2	8
1Ξ02	English for Economists II	3		2
	and 2 elective courses chosen			
	from:			
ECO_132	Accounting II	3	2	6
ECO_222	Computer Assisted Statistics	2	2	6
ECO_240	Economic Geography	3		6
ECO_241	Issues on Digital Economy	3	2	6
Total ECTS credits				30

### THIRD YEAR, 5th Semester (Fall)

Course Code	Course Title	Weekly Hours		ECTS Credits
		L	T/L	
ECO_320	Econometrics	3	1	6
ECO_355	Economics of the Firm	3		6
	and 3 elective courses chosen from:			
ECO_441	Economics of Innovation & Technology	3	3	6
ECO_322	Financial Economics	3	1	6
ECO_340	History of Economic Thought	3		6

ECO_DE227	Business Law	3	6
ECO_393	Energy Economics	3	6
EC0_353	Introduction to Game Theory	3	6
EC0_354	Business Planning	3	6
EC0_DE225	Special Issues of Political Economy	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
Total ECTS credits			30

## THIRD YEAR, 6th Semester (Spring)

Course Code	Course Title	Weekly Hours		ECTS Credits
		L	T/L	
ECO_312	Public Economics	3		6
ECO_350	Economic Policy	3		6
	and 3 elective courses chosen from:			
ECO_230	Greek Economic History	3		6
ECO_332	Financial Analysis & Management	3	1	6
ECO_352	Operational Research	3	2	6
ECO_356	Topics of Economic Geography	3		6
ECO_361	Regional Economics	3		6
ECO_DE205	Labour Law & Labour Relations	3		6
ECO_492	Special Topics in Macroeconomics	3		6
ECO_DE141	Simulation of Business Processes	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
Total ECTS credits				30

## FOURTH YEAR, 7th Semester (Fall)

Course Code	Course Title	Weekly Hours		ECTS Credits
		L	T/L	
ECO_430	International Trade Theory & Policy	3	1	6
ECO_410	Development Economics	3		6
	and 3 elective courses chosen from:			
ECO_351	Data Analysis	3	1	6
ECO_360	Economics of Natural Resources & Environment	3		6
ECO 396	Economics of Education	3		6
ECO_452	Research Methodology in Economics	3		6
ECO_465	Agricultural Policy	3		6

ECO_466	Topics of Regional Development	3	6
ECO_473	Health Economics	3	6
ECO_DE413	Corporate Strategy 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
Total ECTS credits			30

#### FOURTH YEAR, 8th Semester (Spring)

Course Code	Course Title	Weekly Hours		ECTS Credits
		L	T/L	
ECO_401	Economics of Industrial Organization	3		6
ECO_420	Labour Economics	3	2	6
	and 3 elective courses chosen from:			
ECO_330	Investment Appraisal	3		6
ECO 421	Applied Econometrics	3		6
ECO 424	Database Systems	2	2	6
ECO_450	Mathematical Economics	3		6
ECO_471	Economics of Entrepreneurship	3		6
ECO 472	Portfolio Management	3	1	6
ECO 474	Special Topics on Economics of Strategy	3		6
ECO 482	Money and Banking	3	1	6
ECO_494	Climate Change Economics	3	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
Total ECTS credits				30

<sup>\*</sup>not counted towards the final degree-grade & total ECTS

		Total ECTS
BSc Degree in Economics		240

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 <a href="http://www.econ.upatras.gr/en/undergraduate/courses">http://www.econ.upatras.gr/en/undergraduate/courses</a>





## Internship Program

In addition to attending courses, students of the department have the opportunity to do internships in organizations and companies of the public and private sector in subjects related to the curriculum of the department. Contact and cooperation with the labor market is a key element of the Department of Economics' educational process. Participating in the Internship Program provides students with the opportunity to gain practical knowledge and experiences in the field of business and economics, which reflect the corresponding knowledge and skills provided by the department through its curriculum. Further details and information regarding students' participation in the Internship Program is provided on the website:

https://www.econ.upatras.gr/en/undergraduate/internship-program/.

## **ERASMUS** Program

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 <a href="http://www.econ.upatras.gr/en/Erasmus">http://www.econ.upatras.gr/en/Erasmus</a>.

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. George Filis (gfilis@upatras.gr)



## List of ERASMUS Courses, available to incoming Erasmus students in the Academic Year 2024-2025



Member of academic staff responsible	Course Title	ECTS	Semester
	ERASMUS COURSES from the Department of Economics		
E. Tzagarakis & V. Daskalou (Dep. 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> <a href="Type of course">Type of course</a> : taught course if chosen by at least 5 ERASMUS students, reading course otherwise	6	Fall
A. Polymenis (Dep. of Economics)	Statistics II  http://www.econ.upatras.gr/en/undergraduate/courses/statistics-ii  Type of course: taught course if chosen by at least 5 ERASMUS students, reading course otherwise	8	Fall
E. Goulas (Dep. 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> <a href="Type of course">Type of course</a> : taught course if chosen by at least 5 ERASMUS students, reading course otherwise	6	Fall
K. Kounetas (Dep. 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> <a href="Type of course">Type of course</a> : taught course if chosen by at least 5 ERASMUS students, reading course otherwise	6	Fall
E. Tzagarakis & V. Daskalou (Dep. of Economics)	Digital Economy  http://www.econ.upatras.gr/en/undergraduate/courses/issues-digital- economy  Type of course: taught course if chosen by at least 5 ERASMUS students, reading course otherwise	6	Spring
S. Papaioannou (Dep. of Economics)	Macroeconomics II http://www.econ.upatras.gr/en/undergraduate/courses/macroeconomics- ii Type of course: taught course if chosen by at least 5 ERASMUS students, reading course otherwise	8	Spring
N.Giannakopoulos (Dept. 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> <a href="Type of course">Type of course</a> : taught course if chosen by at least 5 ERASMUS students, reading course otherwise	6	Spring
N. Chatzistamoulou (Dep. 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> <a href="Type of course:">Type of course:</a> taught course if chosen by at least 5 ERASMUS students, reading course otherwise	6	Spring
ТВА	English for Economists I https://www.econ.upatras.gr/en/undergraduate/courses/english- economists-i	2	Fall
ТВА	English for Economists II https://www.econ.upatras.gr/en/undergraduate/courses/english-economists-ii	2	Spring

	ERASMUS COURSES from the Department of Business Administration		
I. Stamatiou	eGovernance	5	Fall
(Dep. of Business Administration)	ecovernance	3	i ali
D. Karayianni (Dep. of Business Administration)	Market Research	5	Fall
I.Giannikos & G. Manousakis (Dep. of Business Administration)	Further Operational Research Techniques in Decision Making	5	Fall & Spring
D. Papadimitriou (Dep. of Business Administration)	Event Management	5	Fall
A. Tsaganos (Dep. of Business Administration)	Financial Econometrics	5	Fall
C. Livas (Dep. of Business Administration)	Integrated Marketing Communications	5	Fall
V. Delli (Dep. of Business Administration)	<u>Language Awareness and</u> <u>Introduction to Business English I</u>	5	Fall
V. Delli (Dep. of Business Administration)	Intercultural Business Communication & Cultural Awareness	5	Fall
V.Rizomilioti (Dep. of Business Administration)	Advanced Academic Business English	5	Fall
P. Polychroniou (Dep. of Business Administration)	Conflict Management	5	Spring
D. Koutoulas (Dep. of Business Administration)	Case Studies in Tourism	5	Spring
A. Rapti (Dep. of Business Administration)	Organisational Behaviour	5	Spring
V. Delli (Dep. of Business Administration)	Language Awareness and Introduction to Business English II	5	Spring
V. Delli (Dep. of Business Administration)	English IV-Business Communication	5	Spring
,	ERASMUS COURSES from the Greek Language & Cultural Lab		
Greek Language & Cultural Lab	Introduction to Greek Civilization and Culture  http://greeklab.upatras.gr/about-the-laboratory/	3	Fall & Spring
Greek Language & Cultural Lab	Greek Language Course-Modern  Greek I  http://greeklab.upatras.gr/about-the-laboratory/	6	Fall & Spring
Greek Language & Cultural Lab	Greek Language Course-Modern Greek II http://greeklab.upatras.gr/about-the-laboratory/	6	Fall & Spring



## List of useful addresses

#### **DEPARTMENT OF ECONOMICS**

#### **ACTING HEAD OF DEPARTMENT**

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#### Konstantinos Kounetas, Professor

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Head of the International Office: Mrs Dimitra Stamatopoulou University Campus, Building A' GR-265 04 Patras
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https://www.upatras.gr/el/intrel

Erasmus+ KA1 outgoing mobility for studies tel.: +30 2610969029, e-mail: llp.outgoing@upatras.gr

Erasmus+ KA1 mobility for traineeships, Erasmus+ management-finance Contact person: Polyxeni Christia, tel.: +30 2610969036, e-mail: llp.placements@upatras.gr

Erasmus+ KA103 incoming mobility for studies, Harvard & Johns Hopkins scholarships Contact person: Mariza Charalambopoulou, tel.: +30 2610 997987, e-mail: llp.incoming@upatras.gr, intern.rel@upatras.gr

Erasmus+ Platform design & management Contact person: Maria Kotsari, tel.: +30 2610969028, e-mail: llp.incoming@upatras.gr; intern.rel@upatras.gr

Erasmus+ KA1 outgoing mobility for teaching and training, Erasmus+ KA1 International Credit Mobility, Academic Networks & Associations Contact person: Gely Pavlopoulou, tel: +30 2610 996610, e-mail: llp.outgoing@upatras.gr, intern.rel@upatras.gr

Memorandums of Understanding (MoU), EU Inter-Institutional Agreements (BAs) Contact person: Natassa Anagnostopoulou, tel.: +302610996613, e-mail: anagno@upatras.gr, intern.rel@upatras.gr, llp.incoming@upatras.gr

#### **DEPARTMENT OF STUDENT ISSUES**

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. +30-2610-969613-15Item acquisitions & bibliographical information, Tel. +30-2610-969616IT 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 University Sports Complex, Tel. +30-2610-997593 Post Office, Tel. +30-2610-997593 Bank (branch of Piraeus Bank), Tel. +30-2610-997844 Bookstore «Papasotiriou», Tel. +30-2610-995455 Cafeteria-Restaurant «Parko Irinis», Tel. +30-2610-997839

#### **Academic/Research Staff, Department of Economics**

## E-mail Addresses (in alphabetical order)

#### TEACHING AND RESEARCH STAFF

Chatzistamoulou Nikolaos, Assistant Professor

Dimara Efthalia, Professor

Filis George, Associate Professor

Giannakopoulos Nikolaos, Professor

Goulas Eleftherios, Assistant Professor

Kounetas Konstantinos, Professor

Laliotis Ioannis, Assistant Professor

Manioudis Emmanouil, Assistant Professor

Papaioannou Sotirios, Assistant Professor

Patronis Vasilios, Professor

Polymenis Athanasios, Assistant Professor

Skuras Dimitrios, Professor

Stavropoulos Spyridon, Assistant Professor

Tagkalakis Athanasios, Associate Professor

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Tsekouras Konstantinos, Professor

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#### **SPECIAL TEACHING STAFF**

Daskalou Victoria

#### **EMAIL ADDRESS**

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## Annex-Detailed Description of BSc Courses

#### FIRST YEAR, 1st Semester (Fall)

#### PRINCIPLES OF ECONOMICS I

#### **COURSE OUTLINE**

#### 1. GENERAL

SCHOOL	ECONOMICS	ECONOMICS & BUSINESS		
DEPARTMENT	ECONOMICS			
LEVEL OF COURSE	UNDERGRAD	UATE		
COURSE CODE	ECO_101N <b>SEMESTER OF STUDIES</b> 1st			
COURSE TITLE	PRINCIPLES OF ECONOMICS I			
INDEPENDENT TEACHING ACTIVITIES			TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures and tutorials			4 (lect.) 2 (tut.)	8
COURSE TYPE	Background (	Course, Gene	eral Skills, Skill D	evelopment
PREREQUISITE COURSES:	No			
TEACHING AND ASSESSMENT LANGUAGE:	Greek			
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No			
COURSE WEBPAGE (URL)	-	https://eclass.upatras.gr/courses/ECON1505/ https://eclass.upatras.gr/courses/ECON1506/		

#### 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 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.
- Understand the importance of scarcity in every aspect of economic life.
- Understand the difference between perfectly competitive and non-competitive markets.
- Be able to analyze different types of market (monopoly, oligopoly and competitive market).
- Analyze the effects of changes in demand and supply on prices and quantities of goods and services.
- Solve problems of minimizing production costs.
- Analyze the behavior of producers in a competitive market in the short and long run.
- Solve problems relating to the calculation of the surplus of the consumer and the producer.

#### **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
- 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

TEACHING METHOD	Face-to-face			
USE OF INFORMATION AND	Use of Information and Communica			
COMMUNICATIONS	(e.g. power point) in teaching. The lec			
TECHNOLOGY	uploaded on the e-class platform in the form of ppt files, which			
	the enrolled students can freely download.			
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		
	Individual work 122 hours			
	Total number of hours for the 200 hours (total			
	Course (25 hours of work-load   student work-load)			
	per ECTS credit)			
STUDENT ASSESSMENT	The assessment is based on stude written final examination (80%)			
	examination during the semester (2			
	grade is the sum of a) the final exam g			
	the mid-term exam grade.**			
	Written examinations deal with issue			
	concepts, comparative evaluation of			
	solving numerical problems related to the content of the			
	course. Exam papers are of a mu			
	students are asked to choose the corre			
	from a list of 5 alternative answers	7		
	evaluation criteria are described in the			
	is posted on the platform eclass.upatr	as.gr.		

#### 5. ATTACHED BIBLIOGRAPHY

- Required textbook

Modern Principles: Microeconomics 4th Edition, Cowen, Tyler, Tabarrok, Alex (2019) (In Greek).

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)

- Related Journals

Journal of Economic Literature, Journal of Economic Perspectives, Economic Policy

#### **MATHEMATICS FOR ECONOMISTS I**

#### **COURSE OUTLINE**

#### 1. GENERAL

I. ULIVLIVAL					
SCHOOL	ECONOMICS	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS	ECONOMICS			
LEVEL OF COURSE	UNDERGRA	UNDERGRADUATE			
COURSE CODE	ECO_111N	SI	EMESTER OF	st	
			STUDIES		
COURSE TITLE	MATHEMAT	ΓICS FOR E	CONOMISTS I		
INDEPENDENT TEAC	HING ACTIVITIES TEACHING HOURS EC			ECTS CREDITS	
Lectures and tutorials			4 (lect.) 2 (tut.)	8	
COURSE TYPE	Background	Background, General Knowledge, Skills Development			
PREREQUISITE COURSES:	No	No			
TEACHING AND	Greek				
ASSESSMENT LANGUAGE:					
THE COURSE IS OFFERED	No				
TO ERASMUS STUDENTS					
COURSE WEBPAGE (URL)			<u>.gr/courses/ECC</u>	•	
	https://eclass.upatras.gr/courses/ECON1240/				

#### 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.

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:

- 1) Knowledge
- understand concepts of economic theory using mathematical methods

#### 2) Skills

- use of Excel for introductory level calculations and presentations
- use of mathematical methods in economic science (e.g. modeling)

#### 3) Capabilities

- uses of different ways of thinking (e.g. inductive, productive) to develop specific problemsolving strategies
- presents 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 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

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

	TEACHING AND LEARNING METHODS - ASSESSMENT				
TEACHING METHOD	Lectures and tutorials face to face				
USE OF INFORMATION AND	Support Learning through the e-class	ss nlatform			
COMMUNICATIONS		-			
	<ul> <li>Using Excel and open source progra</li> </ul>	ms to plot functions			
TECHNOLOGY					
TEACHING ORGANIZATION	Activity	Semester workload			
	Lectures (4 hours per week x 13	52 hours			
	weeks)				
	Tutorials (2 hour per week x 11	22 hours			
		22 110 01 5			
	weeks) - solving of representative				
	problems				
	Hours for private study 126 hours				
	Total number of hours for the 200 hours (total				
	Course (25 hours of work-load	student work-load)			
	per ECTS credit)	student work roudy			
	per EC13 credity				
STUDENT ASSESSMENT	The overall course grade is the sum of a) the final exam grade				
	_				
	plus b) if taken, 25% percent of the mid-term exam grade will				
	be added to the total grade subject to the final grade >=5				
	This holds only for the Jan/Feb exam				
	This holds only for the juli/ I co exam				

#### 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography (In Greek):
  - 1. Μαθηματική Ανάλυση για Οικονομικές και Διοικητικές Επιστήμες, Renshaw Geoff Έκδοση: 1/2019, ISBN: 9789925563517
  - 2. Μαθηματικά των Επιστημών Οικονομίας και Διοίκησης, Jacques Ian Έκδοση: 1/2017, ISBN: 9789963274338
  - 3. ΠΡΟΣΚΛΗΣΗ ΣΤΑ ΜΑΘΗΜΑΤΙΚΑ ΟΙΚΟΝΟΜΙΚΩΝ ΚΑΙ ΔΙΟΙΚΗΤΙΚΩΝ ΕΠΙΣΤΗΜΩΝ ΤΟΜΟΣ Α', ΛΟΥΚΑΚΗΣ ΜΑΝΩΛΗΣ Έκδοση: 2η έκδοση/2019, ISBN: 9789606330087

Additional bibliography (In Greek):

Μαθηματικά για Οικονομικές Επιστήμες και Διοίκηση Επιχειρήσεων, Ανδρουλάκης, Γ., Καίσαρη, Μ., Κουνετάς, Κ., Μανουσάκης, Γ., Νίκας, Ι., & Παπαδόπουλος, Δ. 1/2024, ISBN: 9786182281437, ΚΑΛΛΙΠΟΣ Ανοικτές Ακαδημαϊκές Εκδόσεις, http://dx.doi.org/10.57713/kallipos-379

- -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
- 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. 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/CalcI/CalcI.aspx

https://www.geogebra.org/

-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			t
COURSE TITLE	STATISTICS	I		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS	
Lectures and tutorials		nd tutorials	4 (lect.) 2 (tut.)	8
COURSE TYPE	Background	Course, Gene	ral Skills, Skill Devel	opment
PREREQUISITE COURSES:	No			
TEACHING AND				
ASSESSMENT	Greek			
LANGUAGE:	diction			
THE COURSE IS	No			
OFFERED TO				
ERASMUS				
STUDENTS				
COURSE WEBPAGE	https://www.econ.upatras.gr/el/undergraduate/courses/statistics1			
(URL)				

#### 2. LEARNING OUTCOMES

#### **Leraning 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

TEACHING METHOD	Face to face lectures and tutorials.		
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	Use of e-class.		
TEACHING ORGANIZATION	Δραστηριότητα	Φόρτος Εργασίας Εξαμήνου	
	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		
STUDENT ASSESSMENT	The overall course grade is the sum of (a) The final exam grade (80%) (b) 20 percent of the mid-term ex		

#### 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

SCHOOL	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS			
LEVEL OF COURSE	UNDERGRADI	UNDERGRADUATE		
COURSE CODE	ECO_150 <b>SEMESTER OF STUDIES</b> 1st			
COURSE TITLE	INTRODUCTION TO INFORMATION SYSTEMS & APPLICATIONS			
INDEPENDENT TEACHING ACTIVITIES			TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures and tutorials 4 (lect.) 6			6	

		2 (tut.)	
COURSE TYPE	Background Course, Gene	eral Skills, Skill Dev	elopment
PREREQUISITE	No		
COURSES:			
TEACHING AND	Greek, English		
ASSESSMENT			
LANGUAGE:			
THE COURSE IS	Yes (in English)		
OFFERED TO			
ERASMUS			
STUDENTS			
COURSE WEBPAGE	https://eclass.upatras.gr/	courses/ECON142	28/
(URL)			

#### 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 ways of statistical processing of open data using spreadsheets as well as and the programming languages Python and R.
- 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 and data processing in the field of Economics. Using spreadsheets for statistical processing of data. Functions for descriptive statistics. Handling random data. Charting and visualization of data. Introduction to the programming language Python. Data processing module Pandas. Data frames. Reading and handling of csv files. Slicing data frames. Descriptive statistics functions. Charts and plots. Introduction totthe programming language R. Data handling using data frames. Slicing data frames. Descriptive statistics functions. Charts and plots. 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

TEACHING METHOD	Face-to-face	
USE OF INFORMATION AND COMMUNICATIONS	Slides and notes to support lectures	

== 0.11.01 0.01			
TECHNOLOGY	• Spreadsheet software and the	programming languages	
	Python and R for demonstration	and practice	
	• Use of the E-Learning platform ed	class in order to:	
	<ul> <li>Organize the course material (slides, notes,</li> </ul>		
	examples, code snippets etc)		
	<ul> <li>Perform weekly online q</li> </ul>		
	understanding of the rela		
	<ul> <li>Hand in homeworks</li> </ul>		
	<ul> <li>Communicate with the st</li> </ul>	tudents and the class	
	<ul> <li>Open courses and open education</li> </ul>	nal material	
TEACHING ORGANIZATION	Activity	Semester workload	
	Lectures	39 hours	
	Lab exercises 26 hours		
	Team Projects 52 hours		
	Individual quizzes and Self-study 33 hours		
	Total number of hours for the	150 hours (total	
	Course (25 hours of work-load	student work-load)	
	per ECTS credit)		
STUDENT ASSESSMENT	1. Three(3) 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 <u>here</u> .		

#### 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

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

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

Wickham, H. and Grolemund, G.: R for Data Science, 2<sup>nd</sup> edition, O''Reilly 2023. Available from <a href="https://r4ds.hadley.nz/">https://r4ds.hadley.nz/</a>

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

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

#### PRINCIPLES OF ECONOMICS FOR ENGINEERS & SCIENTISTS

#### **COURSE OUTLINE**

#### 1. GENERAL

I. UL	GENERAL			
	SCHOOL	ECONOMICS & BUSINESS		
	DEPARTMENT	ECONOMICS		
	LEVELOF COURSE	UNDERGRADUATE		
	COURSE CODE	ECO_000 SEMESTER OF Fall		
		STUDIES		
	COURSE TITLE	PRINCIPLES OF ECONOMICS FOR ENGINEERS & SCIENTISTS		

INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
	Lectures	3	6
COURSE TYPE	General Background		
SUGGESTED	none		
PREREQUISITE COURSES:			
TEACHING AND	Greek		
ASSESSMENT LANGUAGE:			
THE COURSE IS OFFERED	No		
TO ERASMUS STUDENTS	D ERASMUS STUDENTS		
COURSE WEBPAGE (URL)	DURSE WEBPAGE (URL) <a href="https://eclass.upatras.gr/courses/ECON1392/">https://eclass.upatras.gr/courses/ECON1392/</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

TEACHINGMETHOD	Face to face		
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	ICT in teaching and communication with students (e-class)		
TEACHING ORGANIZATION	Activity Semester workload		
	Lectures 13X3 = 39 hours		
	Work at home 111 hours		
	Total number of hours for the 150 hours (total		
	Course (25 hours of work-load   student work-load)   per ECTS credit)		
STUDENT ASSESSMENT	Written examination based which includes:		
	<ul> <li>Questions of multiple choice type</li> </ul>		
	<ul> <li>Questions of short answer type</li> </ul>		

#### 5. ATTACHED BIBLIOGRAPHY

- Modern Principles: Microeconomics 4th Edition, Cowen, Tyler, Tabarrok, Alex. (2017).
- Microeconomics (The Mcgraw-hill Series in Economics) 2nd Edition, Bernheim, Douglas B., Whinston, Michael D. (2013)
- Microeconomics Fifth Edition, Paul Krugman, Robin Wells. (2017)

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

#### FIRST YEAR, 2nd Semester (Spring)

#### PRINCIPLES OF ECONOMICS II

#### **COURSE OUTLINE**

#### 1. GENERAL

SCHOOL	ECONOMICS & BUSINESS		
DEPARTMENT	ECONOMICS		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	ECO_102N SEMES	TER OF STUDIES	2nd
COURSE TITLE	PRINCIPLES OF ECONOMICS II		
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures and tutorials		4 (lect.) 2 (tut.)	8

COURSE TYPE	Background Course, General Skills, Skill Development
PREREQUISITE	Suggested prerequisites: Principles of Economics I
COURSES:	
TEACHING AND	Greek
ASSESSMENT	
LANGUAGE:	
THE COURSE IS	No
OFFERED TO	
ERASMUS STUDENTS	
COURSE WEBPAGE	https://eclass.upatras.gr/courses/ECON1417/
(URL)	

## 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. GDP and the CPI. Unemployment and Inflation. Long-Run Economic Growth. Savings, Investment Spending, and the Financial System. Income and Expenditure. Aggregate Demand and Aggregate Supply. Fiscal Policy. Money, Banking, and the Federal Reserve System. Monetary Policy. International Macroeconomics.

TEACHING METHOD	Lectures and tutorials face to face.				
USE OF INFORMATION AND COMMUNICATIONS	Use of ICT in teaching and communication with students				
TECHNOLOGY	through the e-class platform.				
TEACHING ORGANIZATION	Activity Semester workload				
	Lectures 52 hours (4X13)				
	Tutorials 26 hours (2X13)				
	Private study 122 hours				
	Total number of hours for the Course (25 hours of work-load per ECTS credit)  200 hours (total student work-load)				
STUDENT ASSESSMENT	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

-Recommended Literature:

Krugman P., Wells R. (2022), Economics, 6th Edition, Macmillan.

Mankiw N. G., Taylor P. M. (2021), Economics, 5th Edition, Cengage.

Sloman J., Wride A., Garratt D. (2015), Economics, 9th Edition, Pearson.

Abel, A. B., Bernanke B. S., Croushore D. (2020), Macroeconomics, 10th Edition, Pearson.

Cowen T., Tabarrok A. (2021), Modern Principles: Macroeconomics, 5th Edition, Macmillan.

-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: <a href="http://www.minfin.gr">http://www.minfin.gr</a>

International Monetary Fund: <a href="http://www.imf.org">http://www.imf.org</a>

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

Financial Times: <a href="https://www.ft.com">https://www.ft.com</a>

The Economist: <a href="https://www.economist.com">https://www.economist.com</a>

## **MATHEMATICS FOR ECONOMISTS II**

## **COURSE OUTLINE**

## 1. GENERAL

SCHOOL	ECONOMICS	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRA	DUATE			
COURSE CODE	ECO_112N	S	EMESTER OF	2 <sup>nd</sup>	
			STUDIES		
COURSE TITLE	МАТНЕМАТ	CICS FOR E	CONOMISTS II		
INDEPENDENT TEACH	ING ACTIVIT	TES	TEACHING		
			HOURS PER WEEK	ECTS CREDITS	
Lectures and tutorials			4(lect.)	8	
2(tut.)					
COURSE TYPE	Background, General Knowledge, Skills Development				
				_	
PREREQUISITE COURSES:	Suggested p	rerequisite	es: Mathematics	for Economists I	
TEACHING AND	Greek				
ASSESSMENT LANGUAGE:					
THE COURSE IS OFFERED	No				
TO ERASMUS STUDENTS					
COURSE WEBPAGE (URL)	https://ecla	https://eclass.upatras.gr/courses/ECON1323/			

#### 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
   Skills
- Distinguish the different cases of mathematical problems and explain their use in relation to the mathematical problem posed.
- Calculate basic mathematical concepts (e.g. maximization of a function, partial derivative calculation).
- 3) Specific skills
- Combine mathematical theory with economic problems.
- Rebuild the economic problem (e.g. Maximize profit in a perfectly competitive market) and explain the solution.
- Be able to evaluate, compare and support the solution.

## **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):

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

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

- Searching, 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

- Functions of several variables: limits, continuity, partial derivatives,
- Differentiation.
- Maxima & minina, Lagrange multipliers,
- Difference equations, including: linear first order, second order with constant coefficients
- Introduction to linear algebra (matrix properties, matrix inversion) & linear systems, elasticity, partial elasticities,
- Economic applications

TEACHING METHOD	Lectures and tutorials face to face
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USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	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.  Exercises and self-assessment through open-ended questions in e-class are also available.				
TEACHING ORGANIZATION	Activity Semester workload				
	Lectures (4 hours per week x 13 weeks)	52 hours			
	Tutorials (2 hour per week x 11 22 hours weeks) - solving of representative problems				
	Hours for private study of the student and preparation of homeworks)				
	Total number of hours for the	200 hours (total			
	Course (25 hours of work-load per ECTS credit)	student work-load)			
STUDENT ASSESSMENT	por accounty				
	The overall course grade is the sum of a) the final exam grade plus b) if taken, 25% percent of the mid-term exam grade will be added to the total grade subject to the final grade >=5				
	This holds only for the June/July exam				

#### 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography (in Greek):
  - 1. Μαθηματικές Μέθοδοι Οικονομικών και Διοικητικών Επιστημών, Pemberton Malcolm, Rau Nicholas Έκδοση: 1/2018, ISBN: 9789925563074
  - 2. Βασικά μαθηματικά για οικονομολόγους, Ross M., Piotr L. Έκδοση: 1η έκδ./2020, ISBN: 9789600236378
  - 3. ΠΡΟΣΚΛΗΣΗ ΣΤΑ ΜΑΘΗΜΑΤΙΚΑ ΟΙΚΟΝΟΜΙΚΩΝ ΚΑΙ ΔΙΟΙΚΗΤΙΚΩΝ ΕΠΙΣΤΗΜΩΝ ΤΟΜΟΣ Β', ΛΟΥΚΑΚΗΣ ΜΑΝΩΛΗΣ Έκδοση: 1η/2014, ISBN: 9789606706752

Additional bibliography (in Greek):

Μαθηματικά για Οικονομικές Επιστήμες και Διοίκηση Επιχειρήσεων, Ανδρουλάκης, Γ., Καίσαρη, Μ., Κουνετάς, Κ., Μανουσάκης, Γ., Νίκας, Ι., & Παπαδόπουλος, Δ. 1/2024, ISBN: 9786182281437, ΚΑΛΛΙΠΟΣ Ανοικτές Ακαδημαϊκές Εκδόσεις, <a href="http://dx.doi.org/10.57713/kallipos-379">http://dx.doi.org/10.57713/kallipos-379</a>

- -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
- 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/CalcI/CalcI.aspx

-Related scientific journals:

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

## **STATISTICS II**

## **COURSE OUTLINE**

## 1. GENERAL

-	· GENERALE						
	SCHOOL	ECONOMICS & BUSINESS					
	DEPARTMENT	ECONOMICS					
	LEVEL OF COURSE	UNDERGRAI	DUATE				
	COURSE CODE	ECO_122N	9	SEMESTER OF	2nd		
			STUDIES				
	COURSE TITLE	STATISTICS	II				
INDEPENDENT TEACHING ACTIVITIES				TEACHING HOURS PER WEEK		ECTS CREDITS	
	Lectures and tutorials			4 (lect.) 2 (tut.)		8	
	COURSE TYPE	Background Course, General Skills, Skill Development					
	PREREQUISITE	Indicative pr	erequisite:				
	COURSES:	Statistics I, Introduction to Information Systems and Applications					
	TEACHING AND	Greek					
	ASSESSMENT						
	LANGUAGE:						
	THE COURSE IS	Yes (in English)					
	OFFERED TO						
	ERASMUS STUDENTS			, ,		_,	
	COURSE WEBPAGE	https://eclas	ss.upatras.g	<u>r/courses/ECO</u>	N122	<u>5/</u>	
	(URL)	1					

## 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.

•

TEACHING METHOD  USE OF INFORMATION AND	Face to face  - Use of e-class to support teaching, laboratory work and				
COMMUNICATIONS TECHNOLOGY	communication with students				
TEACHING ORGANIZATION	Activity	Semester workload			
	Lectures (4 hours per week x 13 52 hours weeks)				
	Tutorials (2 hours per week x 13 26 hours weeks) -				
	Hours for private study and preparation for the Laboratory (study of techniques and theory)  Total number of hours for the Course (25 hours of work-load per ECTS credit)  122  200 hours (total student work-load)				

STUDENT ASSESSMENT	The overall course grade is the sum of
	<ul><li>a) final exam grade (80%), plus</li><li>b) 20 percent of the mid-term exam grade</li></ul>

## 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 H/Y. Typothito publications, Athens.

• In English

SPSS Help System

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

Canavos, G. C. & Miller, D. M. 1993. Wadswarth 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

1.	GENERAL						
	SCHOOL	ECONOMICS & BUSINESS					
	DEPARTMENT	ECONOMICS	ECONOMICS				
	LEVEL OF COURSE	UNDERGRADUA	ATE				
	COURSE CODE	ECO_130	SEMEST	TER OF STUDIES 2	2nd		
	COURSE TITLE	ECONOMIC HIS	TORY				
	INDEPENDENT TE	EACHING ACTIVITIES  TEACHING HOURS PER WEEK  TEACHING ECTS CREDITS					
		Lectures 3 6					
	COURSE TYPE	Field of Economics Science					
	PREREQUISITE	No					
	COURSES:						
	TEACHING AND	Greek	Greek				
	ASSESSMENT						
	LANGUAGE:						
	No	No					
	COURSE WEBPAGE	http://www.ec	<u>on.upatras</u>	gr/el/undergraduat	e/courses/oikonomiki-		
	(URL)	<u>istoria</u>					

#### 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 introduce students to the concepts of Economic History. After successful completion of the course, students are expected to:

- Have the ability to evaluate and compare the various theoretical and empirical approaches to economic and social history
- 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.
- 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.

#### **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

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

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

#### 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:
- -In Greek:
- Β. 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, 3rd Semester (Fall)

#### MICROECONOMICS I

#### **COURSE OUTLINE**

#### 1. GENERAL

SCHOOL	ECONOMICS	S & BUSINI	ESS			
DEPARTMENT	ECONOMICS					
LEVEL OF COURSE	UNDERGRA					
COURSE CODE	ECO_201N		EMESTER OF	3rd		
COOKSE CODE	STUDIES SEMESTER OF STU					
COURSE TITLE	MICROECON	MICROECONOMICS I				
INDEPENDENT TEACHING ACTIVITIES			TEACHING HOURS PER WEEK		ECTS CREDITS	
Lectures and tutorials			4 (lect.) 2 (tut.)		8	
COURSE TYPE	Background Course, General Skills, Skill Development					
PREREQUISITE COURSES:	Suggested prerequisite: Principle of Economics I					
TEACHING AND	Greek					
ASSESSMENT LANGUAGE:						
THE COURSE IS OFFERED	No					
TO ERASMUS STUDENTS						
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1359/					

#### 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 shortand 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

. TEACHING AND LEARNING METHODS - ASSESSMENT				
TEACHING METHOD	Face-to-face class lectures	Face-to-face class lectures		
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	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		
	Total number of hours for the Course (25 hours of work-load per ECTS credit)  200 hours (total student work-load)			
STUDENT ASSESSMENT	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.			

#### 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

SCHOOL	ECONOMICS & BUSINESS				
DEPARTMENT	ECONOMICS				
LEVELOF	UNDERGRADUATE				
COURSE					
COURSE CODE	ECO-203N SEMEST	ER OF STUDIES	3 <sup>rd</sup>		
COURSE TITLE	MACROECONOMICS I				
INDEPENDEN'	INDEPENDENTTEACHINGACTIVITIES  TEACHING HOURS PER WEEK  TEACHING				
	Lectures and tutorials 4 (lect.) 8 2 (tut.)				
COURSE TYPE	Background Course, General Skills, Skill Development				
PREREQUISITE COURSES:	Suggested prerequisite: Principles of Economics II				
TEACHING	Greek				
AND					
ASSESSMENT					
LANGUAGE:					
THE COURSE	No				
IS OFFERED					
TO ERASMUS					
STUDENTS COURSE	http://www.agan.unaturag.gu/an/undauguaduata/agungag/				
WEBPAGE	http://www.econ.upatras.gr/en/undergraduate/courses/macroeconomics-				
(URL)	<u>i</u>				
(CILL)	https://eclass.upatras.gr/courses/ECON1371/				

## 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

. TEACHING AND LEARNING METHODS - ASSESSMENT				
TEACHING METHOD	Face to face lectures and tutorials			
USE OF INFORMATION AND	Use of IT in teaching, and in commun	ication with the students		
COMMUNICATIONS	(e-class)			
TECHNOLOGY				
TEACHING ORGANIZATION	Activity	Semester workload		
	Lectures, 4hours per week	13X4 = 52 hours		
	Tutorials, 2hours per week	13X2 = 26 hours		
	Reading	122 hours		
	Total number of hours for the Course (25 hours of work-load per ECTS credit)  200 hours (total student work-load)			
STUDENT ASSESSMENT	The overall course grade is the sum o times 70% b) the (compulsory) mid-30%, plus c) 20 percent of a mid-term.  The curriculum, samples of an assessment method of the course an are available on the e-class platform students.	term exam grade times (optional) exam grade.  alytical questions, the dother relevant material		

## 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

M.Gartner, Macroeconomics, Pearson, 2016

 $0.\ Blanchard,$  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

- Related Journals:

European Economic Review, Economic Policy, Journal of Macroeconomics

-Useful internet sites:

 $\frac{https://www.economicsnetwork.ac.uk/teaching/Text\%20 and \%20 Notes/Intermediate\%20 Macroeconomics}{omics}$ 

https://www.economist.com/

https://www.oecd.org/

https://www.imf.org/

https://european-union.europa.eu/

https://back.nber.org/releases/

https://www.ecb.europa.eu/

https://www.bankofgreece.gr/

## **ENGLISH FOR ECONOMISTS I**

## **COURSE OUTLINE**

#### 1. GENERAL

1.	GENERAL					
	SCHOOL	ECONOMICS & BUSINESS				
	DEPARTMENT	ECONOMICS	ECONOMICS			
	LEVEL OF COURSE	UNDERGRA	DUATE			
	COURSE CODE	ECO_E01N	ECO_E01N SEMESTER OF 3rd			
			STUDIES			
	COURSE TITLE	ENGLISH FO	R ECONON	MISTS I		
	INDEPENDENT TEACHING ACTIVITIES  TEACHING HOURS PER WEEK  TEACHING					
	Lectures 3 2					
	COURSE TYPE	General Knowledge				
P	REREQUISITE COURSES:	Suggested Prerequisite: English B1/B2				
	TEACHING AND	English				
A	SSESSMENT LANGUAGE:					
	THE COURSE IS OFFERED	Yes				
	TO ERASMUS STUDENTS					
(	OURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1452/				

## 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 is based on student-centered activities that are interactive and develop various aspects of the language. In addition to terminology and concepts related to the field of study, emphasis is also placed on promoting and developing soft and academic skills. As a result, students engage in activities that develop these skills and promote critical thinking. The course is based on the book "English for Business and Accounting" by Disigma Publications (available on Eudoxus). It also relies on authentic material, interactive exercises, and films related to economic topics. Supplementary material and articles are provided by the instructor.

By the end of this course, students will have:

- Improved their understanding of economic terminology, especially the language used in textbooks and economic journals.
- Learned how to understand and analyze authentic materials (texts related to their field).
- Developed their critical thinking.

## Developed academic skills.

#### **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?

- Improvement of skills in the use of the English language
- Improvement of scientific discourse
- Improvement of written and oral communication for specific purposes
- Improvement of communication skills and teamwork

## 3. COURSE CONTENT

Each lesson includes various types of language exercises aimed at acquiring and consolidating academic vocabulary and the language used in the science of economics, as well as soft and academic skills.

#### **Topics**

- History of Economics
- Basic Economic Concepts Understanding terms such as supply and demand, market equilibrium, opportunity cost
- Robert Frost, The Road Not Taken
- Economic Theories and Models Classical and modern economics
- Microeconomics / Macroeconomics
- The Evolution of Money
- Banks and The Supply of Money
- E-commerce
- The Founder (2016). Innovation and Entrepreneurship
- Special Topics: Behavioral Economics.
- Numbers, Graphs, and Charts
- Writing Emails (Subject Lines, topic proposal, etc.)
- Presentation skills
- Research Skills (Source evaluation, CRAAP test)

<ul> <li>Face-to-face: reading texts - oral and written exercises aimed at understanding the text and the academic language of economics</li> <li>Flipped classroom with the aim of developing the initiative of the students and their active participation</li> <li>Reflection</li> </ul>		
<ul> <li>Use of ICT in teaching (Google Docs, polls, word clouds, infographics, PowerPoint, interactive games and exercises)</li> <li>Use of the e-class electronic platform</li> </ul>		
Activity Semester workloo		
Lectures and classroom	13X3 = 39 hours	
exercises/activities.		
Reading- Language and lexical	11 hours	
exercises		
_		
S		
after consultation with the		
	aimed at understanding the tellanguage of economics  • Flipped classroom with the air initiative of the students and to students and to students and the students and the students and the students and the students are students and the students are students as in the students are students as in the students are students as in the students are st	

	instructor (up to 20% of the final grade) C. Online multiple-choice exercises through the e-class module: links (included in the exam material)  Total number of hours for the Course (25 hours of work-load per ECTS credit)  50 hours (total student work-load per ECTS credit)		
STUDENT ASSESSMENT	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.  (b) Optional Assignment A (up to 10% of the final grade)  (c) Optional Assignment B (up to 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.  Teaching and assessment materials and other relevant material are available in e-class and are accessible to all students.		

#### 5. ATTACHED BIBLIOGRAPHY

E-class documents: <a href="https://eclass.upatras.gr/courses/ECON1452/">https://eclass.upatras.gr/courses/ECON1452/</a>

English for Business and Accounting (Disigma Publications).

English – Greek Dictionary of Business and Economic Terms, 2022, Δημήτριος Ξύδης

- Relevant Web links

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

www.theguardian.com/business/glossary-business-terms-a-z-jargon

Αγγλοελληνικό Λεξικό WordReference.com

www.translatum.gr/forum/index.php?action=search2;search=present%20value

www.theguardian.com/business/economics

http://www.economist.com

http://www.smarteconomist.com

## **ACCOUNTING I**

## **COURSE OUTLINE**

#### 1. GENERAL

SCHOOL	ECONOMICS & BUSINESS				
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRAI	DUATE			
COURSE CODE	ECON_131 SEMESTER OF STUDIES 3rd				
COURSE TITLE	ACCOUNTIN	ACCOUNTING I			
INDEPENDENT TEACHING ACTIVITIES			TEACHING HOURS PER WEEK		ECTS CREDITS
Lectures and tutorials		3 (lect.) 2 (tut.)		6	
COURSE TYPE	Skills develo	pment			

PREREQUISITE	No
COURSES:	
TEACHING AND	
ASSESSMENT	Greek
LANGUAGE:	
THE COURSE IS	No
OFFERED TO	
ERASMUS	
STUDENTS	
COURSE WEBPAGE	https://eclass.upatras.gr/courses/ECON1209/
(URL)	

#### 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 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.

## Competences:

• Knowledge of basic accounting concepts and terms such as basic accounting equation, accounting event, balance sheet,

income statement, cash flows statement etc.

- Understand how the double entry system works
- $\bullet$  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.

TEACHINGMETHOD Face-to-face	
-----------------------------	--

USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of Information and Communication Technologies (ICTs) (e.g. power point) in teaching and communicating with students.				
TEACHING ORGANIZATION	Δραστηριότητα Φόρτος Εργασίας Εξαμήνου				
	Lectures	39 hours			
	Study and Analysis of the literature 72 hours				
	Project writing 39 hours				
	Total number of hours for the				
	Course   150 hours (total				
	(25 hours of work-load per ECTS   student work-load)				
	credit)				
STUDENT ASSESSMENT	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:				
	https://eclass.upatras.gr/courses/ECON1209/				

#### 5. ATTACHED BIBLIOGRAPHY

#### -Recommended Literature :

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

 $\hbox{``Principles of Accounting'', Needles, Powers and Crosson, Cengage Learning, 2014.}$ 

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 (<a href="https://aaahq.org/">https://aaahq.org/</a>)

British Accounting Association (<a href="https://bafa.ac.uk/">https://bafa.ac.uk/</a>)

CFA Institute (<a href="https://www.cfainstitute.org/">https://www.cfainstitute.org/</a>)

European Accounting Association (<a href="https://eaa-online.org/">https://eaa-online.org/</a>)

Business Week (https://www.bloomberg.com/businessweek)

The Economist (<a href="https://www.economist.com/">https://www.economist.com/</a>)

Eurostat (https://ec.europa.eu/eurostat)

Financial Times (https://www.ft.com/)

Google Finance (<a href="https://www.google.com/finance">https://www.google.com/finance</a>)

Reuters (<a href="https://www.reuters.com/">https://www.reuters.com/</a>)

Yahoo! Finance (https://finance.yahoo.com/)

Committee of European Securities Regulators (https://www.esma.europa.eu/)

European Union (<a href="https://european-union.europa.eu/">https://european-union.europa.eu/</a>)

International Accounting Standards Board (IASB) (<a href="https://www.ifrs.org/groups/international-accounting-standards-board/">https://www.ifrs.org/groups/international-accounting-standards-board/</a>)

## INTRODUCTION TO CIVIL AND COMMERCIAL LAW

## **COURSE OUTLINE**

## 1. GENERAL

 GENERAL	
SCHOOL	ECONOMICS & BUSINESS
DEPARTMENT	BUSINESS ADMINISTRATION

LEVEL OF COURSE	UNDERGRADUATE				
COURSE CODE	ECO_DE115	SE	MESTER OF	3rd	
			STUDIES		
COURSE TITLE	INTRODUCTION TO CIVIL AND COMMERCIAL LAW				
INDEPENDENT TEAC	INDEPENDENT TEACHING ACTIVITIES  TEACHING HOURS PER WEEK  TEACHING				
	Lectures			6	
COURSE TYPE	General background, Specialised general knowledge				
PREREQUISITE COURSES:	There are no prerequisite courses.				
TEACHING AND	Greek				
ASSESSMENT LANGUAGE:					
THE COURSE IS OFFERED	No				
TO ERASMUS STUDENTS					
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/BMA534/				

#### 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 uncorporated. 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:  $\frac{1}{2}$ 

- 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

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

## 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

## INTRODUCTION TO THE GREEK ECONOMY

## **COURSE OUTLINE**

## 1. GENERAL

SCHOOL	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS			
LEVEL OF COURSE	UNDERGRADUATE			
COURSE CODE	ECO_154 SEMESTER OF		3rd	
		STUDIES		
COURSE TITLE	INTRODUCTION TO THE GREEK ECONOMY			
INDEPENDENT TEACH	ING ACTIVIT	TIES	TEACHING HOURS PER WEEK	ECTS CREDITS
		Lectures	3	6
	Ecctares 5			
COURSE TYPE	Field of Eco	nomics Scie	ence	1
PREREQUISITE COURSES:	Suggested P	rerequisite	es:	
	Principles of Economics I			
TEACHING AND	Greek			
ASSESSMENT LANGUAGE:				
THE COURSE IS OFFERED	No			
TO ERASMUS STUDENTS				
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1378/			

## 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 European ones
- Are familiar with the course of macroeconomic aggregates and the overall evolution of the Greek economy over the period 1992-2015
- Have the opportunity to evaluate the "growth" model of the Greek economy that has led to the financial crisis

## **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

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

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

## 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:
- -In Greek:
- Χ. Κόλλιας-Χ.Ναξάκης-Μ. Χλετσος (επιμέλεια), Σύγχρονες Προσεγγίσεις της Ελληνικής Οικονομίας, εκδόσεις Πατάκη, 2006
- Γ. Αργείτης (επιμέλεια), Οικονομικές Αλλαγές και Κοινωνικές Αντιθέσεις στην Ελλάδα, εκδόσεις "Τυπωθήτω" Γιώργος Δαρδανός, 2005
- Δ. Χιόνης-Γ. Κορρές, Ελληνική Οικονομία, εκδόσεις Σταμούλη, 2003
- Scientific Journals:

European Economic Review, The Journal of European Economy

#### INTRODUCTION TO MARKETING-MANAGEMENT

#### **COURSE OUTLINE**

## 1. GENERAL

I. GENEKAL					
SCHOOL	ECONOMICS	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRADUATE				
COURSE CODE	ECO_220 SEMESTER OF 3 <sup>rd</sup>			3 <sup>rd</sup>	
	STUDIES				
COURSE TITLE	INTRODUCTION TO MARKETING-MANAGEMENT				
INDEPENDENT TEACHING ACTIVITIES HOURS			TEACHING HOURS PER WEEK	ECTS CREDITS	
	Lectures			6	
COURSE TYPE	Field of Scie	nce, Skills	Development		
PREREQUISITE COURSES:	Suggested P	raraguisita	es: Principles of	Franchics I	
TREREGOISTIE COORSES.	Suggested I	rerequisite	.s. i illicipies oi	Leonomics i	
TEACHING AND	Greek				
ASSESSMENT LANGUAGE:					
THE COURSE IS OFFERED	No				
TO ERASMUS STUDENTS					
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1522/				

#### 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

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

#### 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

Μάρκετινγκ-Στρατηγική Προσέγγιση 2η έκδοση, Perreault W.D., Cannon J.P., McCarthy E.J., Έκδοση: 2/2022, ISBN: 9789925588800

Μάρκετινγκ-Έννοιες και Στρατηγικές, Dibb Sally, Simkin Lyndon, Pride William.M., Ferell O.C. Έκδοση: 1/2021, ISBN: 9789925576388

ΜΑΡΚΕΤΙΝΓΚ, Σ. Δημητριάδης, Α. Τζωρτζάκη Έκδοση: 1/2010, ISBN: 9789607745286

-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

## **BEHAVIORAL ECONOMICS**

## **COURSE OUTLINE**

#### 1. GENERAL

SCHOOL	ECONOMICS AND BUSINESS			
DEPARTMENT	ECONOMICS			
LEVEL OF COURSE	UNDERGRADUATE			
COURSE CODE	ECO_252 SEMESTER OF 3 <sup>rd</sup>			3 <sup>rd</sup>
	STUDIES			
COURSE TITLE	BEHAVIORAL ECONOMICS			
INDEPENDENT TEACHING ACTIVITIES  if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits			TEACHING HOURS PER WEEK	ECTS CREDITS
Lectures			3	6

Add rows if necessary. The organisa	ation of teaching and the			
teaching methods used are described in detail at (d).				
COURSE TYPE	Field of Science			
general background,				
special background, specialised				
3 .	general knowledge, skills			
development				
PREREQUISITE	Suggested prerequisites:	Microeconomics	I and II, Macroeconomics	
COURSES:	I and II, and Econometrics			
TEACHING AND	TEACHING AND Greek			
ASSESSMENT				
LANGUAGE:				
THE COURSE IS	No			
OFFERED TO ERASMUS				
STUDENTS				
COURSE WEBPAGE	https://eclass.upatras.gr/courses/ECON1469/			
(URL)	(URL)			

#### 2. LEARNING OUTCOMES

#### Learning outcomes

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

#### Consult Appendix A

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

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

- Understand the limitations of models with rational decision makers.
- Understand the importance of the factors that influence the occurrence of events and the decision-making process.
- Analyze economic behavior using realistic assumptions and irrational behaviors.
- Ask questions that help to realistically depict the behavior of individuals.
- Plan and develop research tasks and experiments.

#### **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 Adapting to new situations

Decision-making Working independently

Team work

Working in an international environment Working in an interdisciplinary environment

Working in an interdisciplinary environment
Production of new research ideas

Project planning and management
Respect for difference and multiculturalism
Respect for the natural environment

Showing social, professional and ethical responsibility and

sensitivity to gender issues Criticism and self-criticism

Production of free, creative and inductive thinking

Others...

- Analyze and synthesize data to make decisions.
- Understand factors that affect the course of events and the decision-making process.
- Synthesize scientific work and develop skills to understand complex problems with critical thinking, logical argumentation.
- Design, organize and synthesize research and scientific experiments and work (research, experiments, RCTs, interviews).
- Calculation and statistical processing programs.
- Project design and management.
- Demonstration of social, professional and moral responsibility.
- Autonomous work and teamwork.
- Work in an international environment and in an interdisciplinary environment.
- Develop new research ideas.

#### 3. COURSE CONTENT

- The course introduces the basic tools in Behavioral Economics required to perform economics analysis and decision-making processes by understanding decision-making mechanisms and basic cognitive science. The experimental approach to basic issues of economics is promoted and presented, which is based on the monitoring of the behavior of individuals under laboratory and real conditions in a theoretical and empirical setting. The course is developed in the following sections:
- Introduction to Behavioral Economics Introductory Concepts Two Systems Behavioral Economics in Selected Scientific Fields
- Heuristic Methods and Prejudices Biases, Exercises and Applications
- Excessive Confidence Mistakes and Misconceptions
- Risk Preferences, Time Preferences Exercises and Applications
- Prospect Theory Exercises and Applications
- Decision Making Procedures and Options Exercises and Applications
- Nudge Theory, Introductory Concepts, Applications Behavioral Changes, Incentives and Nudges
- Applications of Nudge Theory
- Choice Architecture Theory and Applications (Real Life Case studies and RCTs)
- Economic Applications Public Policy Tools

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

# TEACHING METHOD

Face-to-face, Distance learning, etc.

Face-to-face

weeks)

# USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY

Use of ICT in teaching, laboratory education, communication with students

# TEACHING ORGANIZATION

The manner and methods of teaching are described in detail.

Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.

The student's study hours for each learning activity are given as well as the hours of nondirected study according to the principles of the ECTS

#### STUDENT ASSESSMENT

Description of the evaluation procedure

Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other

Specifically-defined evaluation criteria are given, and if and where they are accessible to students.

	(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.				
ı					
	Activity	Semester workload			

Use of Information and Communication Technologies (ICTs)

Individual work	111 hours
Total number of hours for the Course (25 hours of work-load per ECTS credit)	150 hours (total student work-load)

The assessment is based on student's performance in the written final examination (100%), 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 evaluation criteria are described in the Course Syllabus, which is posted on the platform e-class upatras.

#### 5. ATTACHED BIBLIOGRAPHY

#### - Required textbook:

Erik Angner, A Course in Behavioral Economics (London: Red Globe Press, 2021)

Kahneman, Daniel. Thinking, fast and slow. Macmillan, 2011.

Greek edition: Daniel Kahneman (2014) Σκέψη, αργή και γρήγορη: Συμπεριφορική οικονομική, μηχανισμοί λήψης αποφάσεων, γνωσιακή επιστήμη Εκδόσεις Κάτοπτρο, Αθήνα, ISBN: 978-618-5111-24-3. (Κωδικός Βιβλίου στον Εύδοξο: 59370102)

Thaler, R. H. (2015). Misbehaving: The making of behavioral economics. W W Norton & Co.

Greek edition: Richard H. Thaler (2018) Παράτυπη συμπεριφορά, Η διαμόρφωση και η ανάδειξη της συμπεριφορικής οικονομικής, Εκδόσεις Κάτοπτρο, Αθήνα, ISBN: 978-618-5111-85-4. (Κωδικός Βιβλίου στον Εύδοξο: 77107064)

#### - Related Journals:

Games and Economic Behavior, Experimental Economics, Journal of Economic Behavior and Organization, Journal of Economic Psychology, Journal of Behavioral and Experimental Economics

## **BUSINESS ADMINISTRATION I**

## **COURSE OUTLINE**

#### 1. GENERAL

1. GENEKAL					
SCHOOL	ECONOMICS	ECONOMICS & BUSINESS			
DEPARTMENT	BUSINESS ADMINISTRATION				
LEVEL OF COURSE	UNDERGRADUATE				
COURSE CODE	ECO_DE113 SEMESTER OF 3rd			$3^{\mathrm{rd}}$	
	STUDIES				
COURSE TITLE	BUSINESS ADMINISTRATION I				
			TEACHING		
INDEPENDENT TEAC	HING ACTIVIT	ΓIES	HOURS	ECTS CREDITS	
			PER WEEK		
		Lectures	3	6	
COURSE TYPE	Field of Scien	ce			
DDEDEGIJCITE COUDCEC.	Thomas are no				
PREREQUISITE COURSES:	There are no	prerequisite	e courses.		
TEACHING AND	Const				
ASSESSMENT LANGUAGE:	Greek				
	N.				
THE COURSE IS OFFERED	No				
TO ERASMUS STUDENTS					
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/BMA471/				

## 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

TEACHING METHOD.	Lectures				
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	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.				
TEACHING ORGANIZATION	Activity Semester workload				
	Lectures	42			
	Case studies	26			
	Hours for private study of the student 82				
	Total number of hours for the Course (25 hours of work-load per ECTS credit)  150 hours				
STUDENT ASSESSMENT	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, 4th Semester (Spring)**

#### **MICROECONOMICS II**

## **COURSE OUTLINE**

#### 1. GENERAL

1. GENEKAL					
SCHOOL	ECONOMICS	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRADUATE				
COURSE CODE	ECO_202N SEMESTER OF 4th				
	STUDIES				
COURSE TITLE	MICROECONOMICS II				
INDEPENDENT TEACHING ACTIVITIES			TEACHING HOURS PER WEEK		ECTS CREDITS
Lectures and tutorials			4 (lect.) 2 (tut.)		8
COURSE TYPE	COURSE TYPE   Background Course, General Skills, Skill Development				evelopment
PREREQUISITE COURSES:	Suggested p	orerequisit	es: Principal o	f Eco	nomics I and
	Microecono	mics I.			
TEACHING AND	Greek				
ASSESSMENT LANGUAGE:					
THE COURSE IS OFFERED	No	No			
TO ERASMUS STUDENTS					
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1307/				

#### 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

ent's			
nt's			
d			
weeks) tutorials (2 hours per week x 13			
Hours for private study of the student 122 hours			
l)			
per ECTS credit)			
de			
plus b) 20 percent of an optional mid-term exam grade			
9			
exams (40 questions with 5 alternative answers). All the			
information regarding course material, student assessment,			
ich			
l d			

## 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

TI GENERAL					
SCHOOL	ECONOMICS	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS				
LEVELOF	UNDERGRAI	UNDERGRADUATE			
COURSE					
COURSE CODE	ECO_204N	SE	MESTER OF	4 <sup>th</sup>	
			STUDIES		
COURSE TITLE	MACROECON	NOMICS II			
INDEPENDENTT	EACHINGACT	IVITIES	TEACHIN HOURS PER WEE	-	ECTS CREDITS
	Lectures and	tutorials	4 (lect.) 2 (tut.)	IX	8
COURSE TYPE	Background Course, General Skills, Skill Development				
PREREQUISITE	Suggested prerequisites: Macroeconomics I				
COURSES:					
TEACHING	Greek				
AND					
ASSESSMENT					
LANGUAGE:					
THE COURSE IS	Yes (in Engli	sh)			
OFFERED TO					
ERASMUS					
STUDENTS	1 //			1	1
COURSE	2 7 7	<u>.econ.upat</u>	<u>tras.gr/en/un</u>	<u>aergr</u>	raduate/courses/macroeconomics
WEBPAGE	<u>-ii</u>				
(URL)	https://oslas	a unatrac	gr/gourges/E	'COM	1204/
	inups://eclas	<u>ss.upau as</u>	<u>.gr/courses/E</u>	<u>LUIN.</u>	<u>1304/</u>

#### 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

4. TEACHING AND LEARNING	G AND LEARNING METHODS - ASSESSMENT				
TEACHINGMETHOD	Face to face lectures and tutorials				
<b>USE OF INFORMATION AND</b>	Use of IT in teaching, and in commun	nication with the students			
COMMUNICATIONS	(e-class).				
TECHNOLOGY					
TEACHING ORGANIZATION	Activity	Semester workload			
	Lectures, 4 hours per week	13X4 = 52 hours			
	Tutorials, 2 hours per week	13X2 = 26 hours			
	Reading 122 hours				
	Total number of hours for the 200 hours (total				
	Course (25 hours of work-load	student work-load)			
	per ECTS credit)				
STUDENT ASSESSMENT	The overall course grade is the sum of: a) the final exam grade				
	times 70% b) the (compulsory) mid-term exam grade times				
	30%, plus c) 20 percent of a mid-term (optional) exam grade.				
	The curriculum, samples of an	alytical questions, the			
	assessment method of the course an	d other relevant material			
	are available on the e-class platform	and are accessible to all			
	students.				

#### 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:
- M.Gartner, Macroeconomics, Pearson, 2016
- R. Barro, Macroeconomics, 5th Edition, 2012
- O. Blanchard, F. Giavazzi & A. Amighini, Macroeconomics: A European Perspective, Pearson, 2017
- D. Acemoglu, D. Laibson & J. List, Macroeconomics, Pearson, 2015M. Gartner, Macroeconomics, Pearson, 2016
- Related Journals:

European Economic Review, Economic Policy, Journal of Macroeconomics

-Useful internet sites:

 $\underline{\underline{https://www.economicsnetwork.ac.uk/teaching/Text\%20 and\%20 Notes/Intermediate\%20 Macroecon}}$ 

omics

https://www.economist.com/

https://www.oecd.org/

https://www.imf.org/

https://european-union.europa.eu/

https://back.nber.org/releases/

https://www.ecb.europa.eu/

https://www.bankofgreece.gr/

https://www.pbo.gr/

#### ENGLISH FOR ECONOMISTS II

#### **COURSE OUTLINE**

#### 1. GENERAL

CCHOOL	ECONOMICO	O DUCINE	·CC		
SCHOOL	ECONOMICS & BUSINESS				
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRA	DUATE			
COURSE CODE	ECO_E02N	S	EMESTER OF	4 <sup>th</sup>	
333332332		STUDIES STUDIES			
COURSE TITLE	ENGLISH FO	R ECONON	II STSIN		
COORDE TITLE	LIVELIBITIO	OR EGOTTOR			
INDEPENDENT TEACH	ING ACTIVIT	IFC	TEACHING		
INDEL ENDENT TEACH	ING ACTIVIT	ILS	HOURS	ECTS CREDITS	
	PER WEEK				
Lectures			3	2	
COURSE TYPE	General Knowledge				
PREREQUISITE COURSES:	Suggested prerequisite: English for Economists I				
•	8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
TEACHING AND	English				
ASSESSMENT LANGUAGE:					
THE COURSE IS OFFERED	Yes				
TO ERASMUS STUDENTS	103				
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1268/				

#### 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.

- Acquisition of an advanced level of knowledge and the seamless use of English for Specific Purposes (ESP) regarding the four basic skills: reading, writing, listening, and speaking.
- Understanding and analyzing authentic material (texts related to their scientific field) with teaching focused on developing language use skills.
- Familiarization of students with basic principles of academic writing and research related to their science.
- Development of critical and analytical thinking.
- Reading, understanding, analyzing the language of a published journal paper in the field of economics.

#### **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 terminology and language for economics
- Understanding of written and spoken language
- Acquiring academic reading, writing and presentation skills
- Working in an international and interdisciplinary environment

#### 3. COURSE CONTENT

Alongside the book from the previous semester and the instructor's notes, we will use the book "READING AND WRITING ENGLISH FOR ADVANCED STUDENTS OF ECONOMICS AND BUSINESS MANAGEMENT." The aim is to familiarize students with the basic principles of academic writing and research related to their field. The texts selected for linguistic analysis and comprehension aim at acquiring and consolidating academic vocabulary and understanding the language used in economics. At the same time, through the screening of video clips, students can connect science with reality and develop critical and analytical thinking.

#### Topics:

- Macroeconomics: Terms and definitions
- Consumption and investment Economic cycles
- · Aggregate supply and demand
- International Trade Trade Barriers
- Film clips: Financial markets and securities. 'Bubbles' versus market fundamentals
- Film clips: The economics of immigration. Illegal trade
- Film screening: Capitalist systems
- Economic Systems Exploring different economic systems such as capitalism, socialism, and mixed economies
- Special Topics: The Economics of the pharmaceutics Industry. Film screening
- Academic writing: Analysis of results

TEACHING METHOD

- Writing "Economics" The economic approach to writing. The structure of papers published in economic science journals
- Academic writing: Summary, Paraphrasing, Citing sources
- Reading, understanding, and summarizing a published paper in an economic journal

TEACHING METHOD	<ul> <li>Face-to-face: reading texts - oral and written exercises aimed at understanding the text and the academic language of economics</li> </ul>			
	<ul> <li>Flipped classroom with the ai initiative of the students and</li> </ul>			
	<ul> <li>Reflection</li> </ul>			
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	<ul> <li>Use of ICT in teaching (Google Docs, polls, word clouds, infographics, PowerPoint, interactive games and exercises)</li> <li>Use of the e-class electronic platform</li> </ul>			
TEACHING ORGANIZATION	Activity	Semester workload		
	Lectures	13X3 = 39 hours		
	Hours for private studying	11 hours		
	Studying language and lexical			
	exercises			
	A. Optional presentation (topic			
	selection in consultation with the			
	instructor): 30%			
	B. Optional assignment through			
	the e-class platform: 10%			
	Total number of hours for the 50 hours (total			
	Course (25 hours of work-load student work-load) per ECTS credit)			
STUDENT ASSESSMENT	The evaluation is done:			
	(a) through a written examination at the end of the semester,			
	which includes multiple-choice questions, true/false			
	questions, fill-in-the-blank with the correct economic term,			
	matching terms and definitions, text c	omprehension		

questions, and short answer questions (60% of the final
grade).
(b) by completing optional assignment A (30% of the final
grade).
C) by completing optional assignment B (10% of the final
grade).
The course grade will be based 100% on the final exam
for students who choose not to complete the optional
assignments.
The syllabus, evaluation criteria, and other teaching/learning
materials are posted on e-class and are accessible to all
students.

## 5. ATTACHED BIBLIOGRAPHY

READING AND WRITING ENGLISH FOR ADVANCED STUDENTS OF ECONOMICS AND BUSINESS MANAGEMENT (Disigma Publications)

English for Business and Accounting (Disigma)

E-class Documents: <a href="https://eclass.upatras.gr/courses/ECON1268/">https://eclass.upatras.gr/courses/ECON1268/</a>

--Useful internet sites:

https://finance.yahoo.com

https://www.bbc.co.uk/worldservice/learningenglish/language/wordsinthenews/

www.economist.com

https://thecuriouseconomist.com

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

www.smarteconomist.com

https://finance.feedspot.com/economics\_blogs\_for\_students/

## **ACCOUNTING II**

## **COURSE OUTLINE**

## 1. GENERAL

	1				
SCHOOL	ECONOMICS & BUSINESS				
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRAI	DUATE			
COURSE CODE	ECON_132	S	EMESTER OF	FO	URTH
	STUDIES				
COURSE TITLE	ACCOUNTING II				
INDEPENDENTTEACHINGACTIVITIES			TEACHING HOURS PER WEEK		ECTS CREDITS
Lectures and tutorials			3 (lect.) 2 (tut.)		6
COURSE TYPE	Skills develo	pment			
PREREQUISITE	Suggested prerequisites:				
COURSES:	Accounting I				
TEACHING AND					
ASSESSMENT	Greek				
LANGUAGE:					

THE COURSE IS	No
OFFERED TO	
ERASMUS	
STUDENTS	
COURSE WEBPAGE	https://www.econ.upatras.gr/en/undergraduate/courses/accounting
(URL)	-ii

#### 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 solving.

TEACHINGMETHOD	Face-to-face		
USE OF INFORMATION AND	Use of Information and Communication Technologies (ICTs)		
COMMUNICATIONS TECHNOLOGY	(e.g. powerpoint) in teaching and con students.	imunicating with	
TEACHING ORGANIZATION	Activity	Semester workload	
	Lectures, 3hours per week	13X3=39 hours	
	Tutorials, 2hours per week 13X2=26 hours		
	Study and analysis of the 46 hours		
	Project writing and problem sets solving	39 hours	
	Total number of hours for the Course (25 hours of work-load per ECTS credit)	150 hours (total student work-load)	

STUDENT ASSESSMENT	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: https://eclass.upatras.gr/courses/ECON1211/

#### 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 (<a href="https://aaahq.org/">https://aaahq.org/</a>)

British Accounting Association (https://bafa.ac.uk/)

CFA Institute (<a href="https://www.cfainstitute.org/">https://www.cfainstitute.org/</a>)

European Accounting Association (https://eaa-online.org/)

Business Week (https://www.bloomberg.com/businessweek)

The Economist (<a href="https://www.economist.com/">https://www.economist.com/</a>)

Eurostat (<a href="https://ec.europa.eu/eurostat">https://ec.europa.eu/eurostat</a>)

Financial Times (<a href="https://www.ft.com/">https://www.ft.com/</a>)

Google Finance (<a href="https://www.google.com/finance">https://www.google.com/finance</a>)

Reuters (<a href="https://www.reuters.com/">https://www.reuters.com/</a>)

Yahoo! Finance (<a href="https://finance.yahoo.com/">https://finance.yahoo.com/</a>)

Committee of European Securities Regulators (https://www.esma.europa.eu/)

European Union (<a href="https://european-union.europa.eu/">https://european-union.europa.eu/</a>)

International Accounting Standards Board (IASB) (<a href="https://www.ifrs.org/groups/international-accounting-standards-board/">https://www.ifrs.org/groups/international-accounting-standards-board/</a>)

#### **COMPUTER ASSISTED STATISTICS**

## **COURSE OUTLINE**

#### 1. GENERAL

SCHOOL	ECONOMICS & BUSINESS				
DEPARTMENT	ECONOMICS	ECONOMICS			
LEVEL OF COURSE	UNDERGRA	DUATE			
COURSE CODE	ECO_222 SEMESTER OF 4 <sup>TH</sup>				
	STUDIES				
COURSE TITLE	COMPUTER ASSISTED STATISTICS				
INDEPENDENT TEACHING ACTIVITIES			TEACHING HOURS PER WEEK		ECTS CREDITS
Lectures and tutorials			2 (lect.) 2 (tut.)		6

COURSE TYPE	Specialised general knowledge, Skills development
PREREQUISITE COURSES:	No
TEACHING AND	Greek
ASSESSMENT LANGUAGE:	
THE COURSE IS OFFERED	No
TO ERASMUS STUDENTS	
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1364/

#### 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

USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	<ul> <li>Use of e-class to support teaching, laboratory work and communication with students.</li> <li>Use of SPSS Statistical software.</li> </ul>	
TEACHING ORGANIZATION	Activity Lectures, 2 hours per week Laboratory work, 2 hours per week Self-study and homework exercises	Semester workload  13X2 = 26 hours  13X2 = 26 hours  98 hours
STUDENT ASSESSMENT	Total number of hours for the Course (25 hours of work-load per ECTS credit)  Assessment:	150 hours (total student work-load)

(a) Written exam at the end of the semester
(b) Homework exercises (it is optional and count for 20%
of the final grade)

Suggested bibliography:

- SPSS Help system
- Γναρδέλλης, Χ., 2022, Ανάλυση δεδομένων με το IBM SPSS STATISTICS 28, Εκδόσεις Παπαζήση (In greek)
- Keller, G., Gaciu, N., 2019, Statistics for Management and Economics, 2nd Edition, CENGAGE
- Wallgren, A., Wallgren, B., Persson, R., Jorner, U., Haarland, JA., 1996, Graphing Statistics and Data, Sage Publications

### **ECONOMIC GEOGRAPHY**

### **COURSE OUTLINE**

#### 1. GENERAL

1.	GENERAL				
	SCHOOL	ECONOMICS & BUSINESS			
	DEPARTMENT	ECONOMICS			
	LEVEL OF COURSE	UNDERGRADI	UNDERGRADUATE		
	COURSE CODE	ECO_240	SEMESTE	R OF STUDIES	4 <sup>th</sup>
	COURSE TITLE	ECONOMIC GEOGRAPHY			
	INDEPENDENT TEACHING ACTIVITIES			TEACHING HOURS PER WEEK	ECTS CREDITS
			Lectures	3	6
	COURSE TYPE	Field of Science			
	PREREQUISITE COURSES:	Suggested prerequisites: Introduction to Economics I & II			
	TEACHING AND ASSESSMENT LANGUAGE:	Greek			
	THE COURSE IS OFFERED TO ERASMUS	No			
	STUDENTS				
	COURSE WEBPAGE	http://www.e	con.upatra	s.gr/el/undergr	aduate/courses/oikonomiki-
	(URL)	geografia		<del></del>	,

#### 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 cornerstones in the historical development of Economic Geography, its methodology and research orientations from 19th century to contemporary era, through the sussession of different "Paradigms" or schools of thought.

- 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.
- 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.

## **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
- Respect to the natural (and built) environment
- Promotion of free, creative and inductive thinking

#### 3. COURSE CONTENT

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.

TEACHING METHOD	Face to face		
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	<ul> <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>		
TEACHING ORGANIZATION	Activity Lectures (3 hours/week x 13 weeks) Independent study (including the study necessary for the assignments) Total number of hours for the Course (25 hours of work-load per ECTS credit)	39 hours 111 hours 150 hours (total student work-load)	
STUDENT ASSESSMENT	The students' assessment is based up the end of the semester (60% of the fi group assignments/written essays to must present and discuss in the class grade)*. The above percentages may level of difficulty of the assignments.  [* In order for the assignment grad course grade, the student should get a final written exam].	nal course grade) and (2) that each student group (40% of the final course change depending on the	

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.

### -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, Λ. (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**

SCHOOL	ECONOMICS & BUSINESS				
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRA	DUATE			
COURSE CODE	ECO_241 SEMESTER OF 4 <sup>th</sup>				
			STUDIES		
COURSE TITLE	ISSUES ON DIGITAL ECONOMY				
INDEPENDENT TEAC	HING ACTIVI	TIES	TEACHING HOURS	G	ECTS CREDITS
			PER WEEK	ζ.	EC13 CREDI13
	Lectures and	tutorials		ζ	6
	Lectures and	tutorials	PER WEEF 3 (lect.)	ζ	

PREREQUISITE COURSES:	Suggested Prerequisite: Introduction to Information Systems and Applications
TEACHING AND	Greek, English
ASSESSMENT	
LANGUAGE:	
THE COURSE IS	Yes (In English)
OFFERED TO ERASMUS	
STUDENTS	
COURSE WEBPAGE	http://www.econ.upatras.gr/el/undergraduate/courses/themata-
(URL)	<u>psifiakis-oikonomias</u>
	https://eclass.upatras.gr/courses/ECON1315/ (Open course)

## **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 entreprises.
- 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.

TEACHING METHOD	Face to face		
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	<ul> <li>Slides and notes to support lectures</li> <li>Software for demonstration and practical application purposes to show statistical data processing.</li> </ul>		

	Use of the E-Learning platform eclass in order to:  Organize the course material (slides, notes, examples, code snippets etc)  Perform weekly online quizzes to evaluate the understanding of the related course material  Hand in homeworks  Communicate with the students and the class  Open video-lectures		
TEACHING ORGANIZATION	Activity	Semester workload	
	Lectures Lab exercise Team Project Quizzes, individual assignments and Self-study	39 hours 26 hours 60 hours 25 hours	
	Total number of hours for the Course (25 hours of work-load per ECTS credit)	150 hours (total student work-load)	
STUDENT ASSESSMENT	<ol> <li>Team Project: 30%</li> <li>Multiple choice exam: 70%</li> </ol> The evaluation criteria are available t	o students at eclass <u>here</u>	

#### - Suggested literature:

Jeffrey F. Rayport (2007). Introduction to E-Commerce, McGraw-Hill, 2nd edition.

Tapscott, D. (2014). The digital economy anniversary edition: rethinking promise and peril in the age of networked intelligence. McGraw Hill Professional.

Tapscott, D. (2000). The Digital Economy. Leader Books, 1997

## -Additional Literature:

Shapiro, C., & Varian, H. R. (1998). Information rules: a strategic guide to the network economy. Harvard Business Press.

Antonopoulos, A. M. (2014). Mastering Bitcoin: unlocking digital cryptocurrencies. O'Reilly Media, Inc.

Lehdonvirta, V., & Castronova, E. (2014). Virtual economies: Design and analysis. MIT Press.

Harris, A. (2014). HTML5 and CSS3 All-in-one for Dummies. John Wiley & Sons.

#### -Open courses:

Open Course Erasmus+ «OpEn: Digital Entrepreneurship» Available from: <a href="https://openup.upatras.gr/courses/GR103/">https://openup.upatras.gr/courses/GR103/</a>

Rappa, M. (2001). Managing the digital enterprise-Business models on the Web.  $\Delta\iota\alpha\theta\dot{\epsilon}\sigma\iota\mu$ o:  $\frac{http://digitalenterprise.org/models/models.html}{}$ 

Khan Academy. Internet 101. Διαθέσιμο:

https://www.khanacademy.org/computing/computer-science/internet-intro

# THIRD YEAR, 5th Semester (Fall)

#### **ECONOMETRICS**

#### **COURSE OUTLINE**

#### 1. GENERAL

SCHOOL	ECONOMICS & BUSINESS				
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRAD	UNDERGRADUATE			
COURSE CODE	ECO_320	SEMESTER	SEMESTER 5 <sup>th</sup>		
		OF STUDIES			
COURSE TITLE	ECONOMETR	RICS			
INDEPENDENT TEACHING	INDEPENDENT TEACHING ACTIVITIES			ECTS CREDITS	
Lecture	s and tutorials	3 (Lect.)		6	
	1 (tut.)				
COURSE TYPE	Background, Field of Economics Science, 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				
TEACHING AND	Greek				
ASSESSMENT LANGUAGE:					
THE COURSE IS OFFERED	No				
TO ERASMUS STUDENTS					
COURSE WEBPAGE (URL)	https://eclas	s.upatras.gr/cοι	<u>ırses/E</u>	CON1202/	

### 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. Use open source software at an introductory level, e.g. gretl
- 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

#### Lecture 7 - 8:

Time as an explanatory variable, Logarithmic-log transformation, Logarithmic-linear transformation, Linear logarithmic transformation, Stationarity and and non-stationarity, Maximum likelihood method

#### Lecture 9 - 10 - 11:

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

#### Lecture 12-13:

Testing joint linear restrictions. F-tests.

TEACHING METHOD	Face to face lectures and tutorials				
<b>USE OF INFORMATION AND</b>	<ul> <li>Support Learning through the e-cla</li> </ul>	ss platform			
COMMUNICATIONS	• Using <b>Excel</b> and the open-source p	rogram <b>gretl</b> for practice			
TECHNOLOGY	on all the taught techniques and the				
	results	•			
TEACHING ORGANIZATION	Activity	Semester workload			
	Lectures	39 hours(3x13)			
	Tutorials-Practice exercises	13 hours (1x13)			
	focusing on the application of				
	methodologies and analysis of				
	case studies to small groups of				
	students				
	Hours for private study of the 98 hours				
	student and preparation of home-				
	works				
	Total number of hours for the 150 hours (total				
	Course (25 hours of work-load   student work-load)				
	per ECTS credit)				
STUDENT ASSESSMENT	I. Written final exam in Greek la	anguage which includes			
	multiple-choice questions with or without justification				
	II. Optional individual (grade augr	nentation) projects that			
	involve econometric exercises using ${f l}$	Excel and / or gretl			

### - Suggested bibliography:

- •
- ΕΙΣΑΓΩΓΗ ΣΤΗΝ ΟΙΚΟΝΟΜΕΤΡΙΑ, ΒΕΝΕΤΗΣ ΙΩΑΝΝΗΣ, Έκδοση: 3/2021, ISBN: 9786185560096
- ΟΙΚΟΝΟΜΕΤΡΙΑ, ΤΖΑΒΑΛΗΣ ΗΛΙΑΣ, Έκδοση: 1/2008, ISBN: 9789609856607

#### -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 Rassell 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**

SCHOOL	ECONOMI	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMI	ECONOMICS			
LEVEL OF COURSE	UNDERGR	ADUATE			
COURSE CODE	ECO_355	ECO_355 SEMESTER OF 5 <sup>th</sup>			
			STUDIES		
COURSE TITLE	ECONOMI	ECONOMICS OF THE FIRM			
INDEPENDENT TEACHING ACTIVITIES			TEACHING HOURS PER WEEK		ECTS CREDITS
Lectures			3		6
COURSE TYPE	Special background				
PREREQUISITE COURSES:	Suggested prerequisites:				
	Micro-economics I and II.				

TEACHING AND ASSESSMENT LANGUAGE:	Greek
THE COURSE IS OFFERED	No
TO ERASMUS STUDENTS	
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1390/

#### **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. Multicolinearity, 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.

TEACHINGMETHOD	Face-to-face			
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of Information and Communication Technologies (ICTs) (e.g. powerpoint) in teaching and communicating with students.			
TEACHING ORGANIZATION	Activity	Semester workload		
	Lectures	39 hours		
	Study and analysis of the 72 hours literature			
	Project writing and problem sets 39 hours			
	solving  Takel mumber of hours for the			
	Total number of hours for the Course 150 hours (total (25 hours of work-load per ECTS student work-load)			
STUDENT ASSESSMENT	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/ECON1390/">https://eclass.upatras.gr/courses/ECON1390/</a>			

### 5. RECOMMENDED LITERATURE

- Recommened 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: https://eclass.upatras.gr/courses/ECON1390/-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

https://iobe.gr/

https://www.economist.com/

https://www.ft.com/europe

https://www.wsj.com/world/europe

https://www.worldbank.org/

### **ECONOMICS OF INNOVATION & TECHNOLOGY**

## **COURSE OUTLINE**

#### 1. GENERAL

1.	GENERAL					
	SCHOOL	ECONOMICS	ECONOMICS & BUSINESS			
	DEPARTMENT	ECONOMICS				
	LEVEL OF COURSE	UNDERGRAD	UNDERGRADUATE			
	COURSE CODE	ECO_441	SEMEST	ER OF STUDIES 5	5 <sup>th</sup>	
	COURSE TITLE	ECONOMICS	ECONOMICS OF INNOVATION & TECHNOLOGY			
	INDEPENDENT TEA	TEACHING ACTIVITIES  HOURS PER WEEK  TEACHING ECTS CREDITS				
	Lectures and tutorials			3 (lect.) 3 (tut.)	6	
	COURSE TYPE	Field of Scien	ce			
	PREREQUISITE COURSES:	Suggested prerequisites: Economic Geography			hy	
	TEACHING AND	Greek	Greek			
	ASSESSMENT					
	LANGUAGE:					
	THE COURSE IS	No				
,	OFFERED TO					
	ERASMUS STUDENTS	1		/ / / / / / / / / / / / / / / / / / / /	0.4	
	COURSE WEBPAGE	https://eclas	s.upatras.gr	<u>/courses/ECON122</u>	<u>U/</u>	
	(URL)					

## 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).

TEACHING METHOD	Face to face			
	race to race			
USE OF INFORMATION AND	• Use of PowerPoint during lectures			
COMMUNICATIONS	• Lecturing notes are uploaded in e-class in the form of pdf			
TECHNOLOGY	files, which the enrolled students can freely download			
	Bibliographical material (sciential)			
	chapters) in pdf files, is regularly u	_		
	<ul><li>the enrolled students can freely dov</li><li>Various information and announce</li></ul>			
	course are regularly uploaded in e-c			
	<ul> <li>Distant communication with student</li> </ul>			
	place via e-mail	ino (mion necuca) canos		
TEACHING ORGANIZATION	Activity	Semester workload		
	Lectures (3 hours/week x 13	39 hours		
	weeks)			
	Tutorials (3 hours/week x 13 39 hours			
	weeks)			
	Independent study (including the 72 hours			
	study necessary for the assignments)			
	Total number of hours for the	150 hours (total		
	Course (25 hours of work-load	student work-load)		
	per ECTS credit)			
STUDENT ASSESSMENT	The students' assessment is based upon: (1) written exams at			
	the end of the semester (60% of the fi			
	group assignments/written essays t			
	must present and discuss in the class			
	grade)*. The above percentages may	change depending on the		
	level of difficulty of the assignments.			

[\* 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].

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 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

#### 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.

clearly defined.

-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.

#### FINANCIAL ECONOMICS

## **COURSE OUTLINE**

SCHOOL	ECONOMICS & I	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS				
LEVEL OF	UNDERGRADUA	ATE			
COURSE					
COURSE CODE	ECO_322	SEMES	TER OF STUDIES	5 <sup>th</sup>	
COURSE TITLE	FINANCIAL ECC	FINANCIAL ECONOMICS			
INDEPENDENT	ENDENT TEACHING ACTIVITIES  TEACHING HOURS PER WEEK  TEACHING HOURS ECTS CREDITS				
	Lectures and tutorials			6	
COURSE TYPE	Field of Science				
PREREQUISITE COURSES:	Suggested Prerequisites: Principles of Economics I & II				

TEACHING AND	Greek
ASSESSMENT	
LANGUAGE:	
THE COURSE IS	No
OFFERED TO	
ERASMUS	
STUDENTS	
COURSE	https://eclass.upatras.gr/courses/ECON1521/
WEBPAGE (URL)	

#### **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:

- Demonstrate in-depth understanding of the information and conceptual underpinnings in areas of business planning and managing business complexity.
- 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.
- Identify and define complex managerial and organizational problems and apply appropriate knowledge as well as creative and entrepreneurial thinking to reach solutions.
- Apply problem-solving techniques drawn from business management, design management, sustainability management, financial management, and marketing management, as appropriate, to determine effective solutions
- 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.

## **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 which are related to finance theory.
- 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 (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
- Work design and management

### 3. COURSE CONTENT

- Introduction to the basic concepts of modern finance
- Time Value of Money
- Debt Valuation and Interest Rates
- Stock Valuation
- Risk and Return relationship & Portfolio Theory
- Asset Pricing Models (CAPM)
- The cost of capital
- Capital Expenditure Budget. Criteria for Investment Decisions

- Capital Structure Policy & Dividend Policy
- Corporate Risk Management

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

4. I LACITING AND LEARNING	HILIHODS HOSESSHENI			
TEACHING METHOD	Face to face lectures			
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of Information and Communication Technologies (ICTs) in teaching (e-class).			
TEACHING ORGANIZATION	Activity	Semester workload		
	Lectures, 3 hours per week	13X3 = 39 hours		
	Tutorials, 1 hour per week 13X1 = 13 hours			
	Individual study	98 hours		
	Total number of hours for the 150 hours (total			
	Course (25 hours of work-load   student work-load)   per ECTS credit)			
STUDENT ASSESSMENT	Written final exam that may include r short answer questions, solvin interpretation of results. The final gr from the performance in the final ex prepare a paper, then the final grade of the performance in the final exam and	g exercises, financial ade of the course results cam. In case the students results cumulatively from		

#### 5. ATTACHED BIBLIOGRAPHY

### - Suggested bibliography:

Money, Banking and Financial Markets, Stephen Cecchetti, Kermit Schoenholtz, 5th Edition, 2016, McGraw Hill, ISBN 1259746747.

Saunders Anthony, Cornett Marcia M., Financial Markets and Institutions, 7th edition, 2018, McGraw Hill, ISBN 1259919714

Applied Corporate Finance, Aswath Damodaran, 4th Edition, 2014, Wiley, ISBN 1118808932

Brealey, R. A., S.C. Myers and A.J. Marcus (2012), Fundamentals of Corporate Finance, McGraw-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**

SCHOOL	ECONOMICS & BUSINESS
DEPARTMENT	ECONOMICS

LEVEL OF COURSE	UNDERGRA	UNDERGRADUATE		
COURSE CODE	ECO_340	_		5 <sup>th</sup>
			STUDIES	
COURSE TITLE	HISTORY OF	F ECONOM!	IC THOUGHT	
INDEPENDENT TEACH	ING ACTIVITIES  TEACHING HOURS PER WEEK			ECTS CREDITS
	Lectures 3 6			6
COURSE TYPE	Field of Economics Science			
PREREQUISITE COURSES:	Suggested Prerequisites:			
	Economic H	istory		
	Principles of	f Economic	s I & II	
TEACHING AND	Greek			
ASSESSMENT LANGUAGE:				
THE COURSE IS OFFERED	No			
TO ERASMUS STUDENTS				
COURSE WEBPAGE (URL)	https://ecla	ss.upatras.	gr/courses/ECO	ON1377/

#### **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.

TEACHING METHOD	Face to face
-----------------	--------------

USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of IT in teaching, and in commun (e-class).	ication with the students
TEACHING ORGANIZATION	Activity  Lectures  Reading  Total number of hours for the Course (25 hours of work-load per ECTS credit)	Semester workload  13X3 = 39 hours  111 hours  150 hours (total student work-load)
STUDENT ASSESSMENT	End of semester final written exa	m

- Suggested bibliography:
- -In Greek:
- E. Screpanti-S. Zamagni, Ιστορία της Οικονομικής Σκέψης, εκδόσεις "Τυπωθήτω" Γιώργος Δαρδανός, 2004.

Robert L. Heilbronner, 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

## **BUSINESS LAW**

## **COURSE OUTLINE**

## 1. GENERAL

1. ULNLIVAL						
SCHOOL	ECONOMICS	ECONOMICS & BUSINESS				
DEPARTMENT	BUSINESS ADMINISTRATION					
LEVEL OF COURSE	UNDERGRAD	UATE				
COURSE CODE	ECO_DE227	ECO_DE227   SEMESTER OF STUDIES   5 <sup>th</sup>				
COURSE TITLE	BUSINESS LA	W				
INDEPENDENT TEAC	TEACHING CHING ACTIVITIES HOURS PER WEEK  TEACHING HOURS FOR BETTS CREDITS					
	Lectures 3 6					
COURSE TYPE	General background, Specialised general knowledge					
PREREQUISITE COURSES:	There are no prerequisite courses.					
TEACHING AND ASSESSMENT LANGUAGE:	Greek					
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No					
COURSE WEBPAGE (URL)	https://eclas	s.upatras.gı	r/courses/BMA53	<u>85/</u>		

## 2. LEARNING OUTCOMES

Learning ou	tcomes		

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, director's 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, director's 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.

TEACHING METHOD.	Lectures		
USE OF INFORMATION AND COMMUNICATION	Communication with students using the campus LMS (eclass)		
TECHNOLOGIES			
TEACHING ORGANIZATION	Activity	Semester workload	
	Lectures	50	
	Exercises	25	

	Private study	75		
	Total number of hours for the Course (25 hours of work-load per ECTS credit)	150 hours		
STUDENT ASSESSMENT	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.

#### **ENERGY ECONOMICS**

### **COURSE OUTLINE**

#### 1. GENERAL

1. GENERAL					
SCHOOL	ECONOMICS	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRA	DUATE			
COURSE CODE	ECO_393	S	EMESTER OF	5 <sup>th</sup>	
			STUDIES		
COURSE TITLE	ENERGY EC	ONOMICS			
			TEACHING		
INDEPENDENT TEACH	ING ACTIVIT	'IES	HOURS	ECTS CREDITS	
			PER WEEK		
Lectures and tutorials			3 (lect.)	6	
			1 (tut.)		
COURSE TYPE	Field of Science and Skills Development			nt	
PREREQUISITE COURSES:	Suggested n	roroguicito	es: Microeconor	nice I 9- II	
PREREQUISITE COURSES:	Suggesteu p	rerequisite	es. Microeconor	IIICS I & II	
TEACHING AND	Greek				
ASSESSMENT LANGUAGE:	Greek				
	W (0 T 111)				
THE COURSE IS OFFERED	Yes (in English)				
TO ERASMUS STUDENTS					
COURSE WEBPAGE (URL)			.gr/courses/EC		
	https://ecla	https://eclass.upatras.gr/courses/ECON1321/(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

TEACHING METHOD	a) Lectures and tutorials and face to face.	
	b) Supplementary learning based on the material in the open course entitled "Energy Economics"	
	(https://eclass.upatras.gr/courses/ECON1321/)	
<b>USE OF INFORMATION AND</b>	Use of Information and Communication Technologies (ICTs)	
COMMUNICATIONS	(e.g. PowerPoint) in teaching. The lectures for each chapter	

TECHNOLOGY	are uploaded on the e-class platform, in the form of ppt files, which the enrolled students can freely download.		
TEACHING ORGANIZATION	Activity Semester workload		
	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	
	Total number of hours for the Course (25 hours of work-load per ECTS credit)	150 hours (total student work-load)	
STUDENT ASSESSMENT	<ul><li>a) Written examination at the end of the semester (70%) - final grade.</li><li>b) Assignments with a 30% weight factor to the total grade.</li></ul>		

#### - 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) ( $\kappa\epsilon\phi.90$ )

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

Kounetas K., and Tsekouras K., (2008), "The EnergyEfficiency 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/

### INTRODUCTION TO GAME THEORY

#### **COURSE OUTLINE**

SCHOOL	ECONOMICS AND BUSINESS
DEPARTMENT	ECONOMICS
LEVEL OF COURSE	UNDERGRADUATE

COURSE CODE	ECO_353 SEMESTER OF STUDIES			5 <sup>th</sup>
COURSE TITLE	INTRODUCT	ΓΙΟΝ ΤΟ G	AME THEORY	
if credits are awarded for separate e.g. lectures, laboratory exercises, et for the whole of the course, give the the total cre	components of to c. If the credits a weekly teaching	he course, re awarded	TEACHING HOURS PER WEEK	ECTS CREDITS
		Lectures	3	6
Add rows if necessary. The organisate teaching methods used are described		nd the		
course type general background, special background, specialised general knowledge, skills development PREREQUISITE COURSES:	Field of Science  Suggested prerequisites: Principle of Economics I, Mathematics I, Statistics I.			
TEACHING AND ASSESSMENT LANGUAGE:				
THE COURSE IS OFFERED TO ERASMUS STUDENTS				
COURSE WEBPAGE (URL)	https://eclass.upatras.gr			

#### **Learning outcomes**

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

Consult Appendix A

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

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

- Understand the interaction of players in strategic games and analyze these behaviors in the field of
  economics (and not only) within the context of the analysis of Game Theory (development of
  strategies and performances)
- Calculate strategic outcomes in different games and be able to predict the outcome of the game.
- Participate and design economic experiments
- Develop critical thinking skills in assessing competing ideas and approaches using various methods to address relevant problems.
- Develop complex writing and presentation skills for a research work on various topics of interest within the classroom.

#### **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, Project planning and management

with the use of the necessary technology Respect for difference and multiculturalism
Adapting to new situations Respect for the natural environment

Decision-making Showing social, professional and ethical responsibility and sensitivity to

Working independently gender issues
Team work Criticism and self-criticism

Working in an international environment Production of free, creative and inductive thinking

Working in an interdisciplinary environment .....

Production of new research ideas Others...

- Search, analyze and synthesize data and information, using the necessary technologies
- Adapt to new situations

- Decision making
- Autonomous work
- Working in an international environment
- 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

- Strategic games, Nash equilibrium, reaction function, dominant strategies
- Applications of equilibrium in well-known games: oligopoly, electoral competition, conflicts, auctions, law.
- Mixed strategies, beliefs. Extensive games with perfect information
- Applications: (e.g., Stackelberg, voting, technology race)
- Introduction to experimental economic in classroom and assignment presentations

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

#### TEACHING METHOD Face-to-face Face-to-face, Distance learning, etc. **USE OF INFORMATION AND** Use of Information and Communication Technologies (ICTs) **COMMUNICATIONS** (e.g. powerpoint) in teaching. The lectures for each chapter are TECHNOLOGY uploaded on the e-class platform in the form of ppt files, which Use of ICT in teaching, laboratory education, the enrolled students can freely download. communication with students **TEACHING ORGANIZATION** Activity Semester workload The manner and methods of teaching are Lectures (3 hours per week x 13 39 hours described in detail. weeks) Lectures, seminars, laboratory practice, Individual work 111 hours fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc. Total number of hours for the 150 hours (total The student's study hours for each learning Course (25 hours of work-load per student work-load) activity are given as well as the hours of non-**ECTS** credit) directed study according to the principles of the **ECTS**

#### STUDENT ASSESSMENT

Description of the evaluation procedure

Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, openended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other

Specifically-defined evaluation criteria are given, and if and where they are accessible to students.

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 evaluation criteria are described in the Course Syllabus, which is posted on the platform e-class upatras.

#### 5. ATTACHED BIBLIOGRAPHY

### - Required textbook:

Martin J. Osborne, An Introduction to Game Theory. Oxford University Press; 1st edition (August 7, 2003)

Greek edition: Μ. Osborne, Εισαγωγή στη Θεωρία Παιγνίων, εκδ. Κλειδάριθμος, Αθήνα 2010. Κωδικός Βιβλίου στον ΕΥΔΟΞΟ: 35241. R.

Robert S. Gibbons, Game Theory for Applied Economists, Princeton University Press, 1992. (International version: A Primer in Game Theory, Harvester-Wheatsheaf.)

Greek edition: Gibbons, Εισαγωγή στη Θεωρία Παιγνίων, εκδ. Γ. & Κ. Δαρδανός, Αθήνα 2009. Κωδικός Βιβλίου στον ΕΥΔΟΞΟ: 31325.

Roger A McCain, Game Theory: A Nontechnical Introduction to the Analysis of Strategy, WSPC; 3rd ed. edition (April 29, 2014)

Greek edition: McCain Roger A. Θεωρία Παιγνίων, εκδ. Broken Hill Publishers Ltd, ISBN 9789925575404, Κωδικός Βιβλίου στον Εύδοξο: 86056102

Nearchou Andreas, Understanding Gaming Strategy-An Analytical Approach Through Solved Examples, published by Broken Hill Publishers Ltd, ISBN: 9789925588732 (in Greek)

#### - Related Journals:

Theoretical Economics, Journal of Economic Theory, Games and Economic Behavior, International Journal of Game Theory, Dynamic Games and Applications, Experimental Economics, Journal of Economic Behavior and Organization, Theory and Decision, Games, International Game Theory Review

### **BUSINESS PLANNING**

#### **COURSE OUTLINE**

#### 1. GENERAL

SCHOOL	ECONOMICS AND BUSINESS			
DEPARTMENT	ECONOMICS			
LEVEL OF COURSE	UNDERGRADUATE			
COURSE CODE	ECO_354	ECO_354 SEMESTER OF 5 <sup>th</sup>		
			STUDIES	
COURSE TITLE	BUSINESS P	LANNING		
INDEPENDENT TEACH	ING ACTIVIT	ΓIES		
if credits are awarded for separate	,	•	TEACHING	
e.g. lectures, laboratory exercises, et	-		HOURS	ECTS CREDITS
for the whole of the course, give the		hours and	PER WEEK	
the total cre	aits	Lectures	3	6
Add rows if necessary. The organisat	ion of teaching a		3	0
teaching methods used are described	, ,	iiu tiie		
COURSE TYPE	Scientific area	a and skill d	evelopment	
general background,	Selentific area and skill development			
special background, specialised general				
knowledge, skills development				
PREREQUISITE	No			
COURSES:				
TEACHING AND	Greek			
ASSESSMENT	Citek			
LANGUAGE:				
THE COURSE IS	Yes			
OFFERED TO ERASMUS				
STUDENTS				
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1504/			
	-	-		

## 2. LEARNING OUTCOMES

### **Learning outcomes**

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

Consult Appendix A

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

Students learn the complex dimensions of entrepreneurship; and how to identify and evaluate business opportunities, and develop evidence-based innovative ideas through the solid development of a detailed Business Plan.

#### **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

Adapting to new situations

Project planning and management Respect for difference and multiculturalism Respect for the natural environment

Decision-making Showing social, professional and ethical responsibility and sensitivity to

Working independently gender issues

Team work Criticism and self-criticism

Working in an international environment Production of free, creative and inductive thinking

Working in an interdisciplinary environment ......

Production of new research ideas Others...

The course equips students with knowledge and skills in critical evaluation, analysis and synthesis of data and information.

It enhances design thinking and problem solving skills; as well as critical thinking in decision making. It cultivates team spirit and cooperation.

Students learn to apply modern techniques and technologies for data and information analysis.

#### 3. COURSE CONTENT

The course is based on active learning, as it includes the practical application of theoretical knowledge in realistic business cases (case-studies). In this context, students are taught the entire cycle of the business process, from the identification of the opportunity and its evaluation, to the creation of the company and the management of its development. They learn how to use data on current economic, technological and industry developments, demand and supply, etc., to document the innovativeness and competitiveness of a business venture.

The content of the course includes the following thematic sections:

- Business environment Market and Competition Analysis
- Evaluation and exploitation of business opportunities
- Design thinking to generate and analyze business ideas
- Corporate environmental and social sustainability
- Corporate form and location
- Short-term and long-term Qualitative (strategic) implementation goals
- Short-term and long-term Quantitative (operational, financial) goals
- Business Administration and Operational Management (Logistics) Plan
- Sales and Marketing Strategy
- Pricing strategy
- Preparation and evaluation of the Business Plan

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

#### TEACHING METHOD Interactive Lectures to the audience and Open Consultation of Face-to-face, Distance learning, etc. work groups at each stage of their Business Plan preparation USE OF INFORMATION AND Support the learning process through: COMMUNICATIONS Open Educational Resources bibliography and **TECHNOLOGY** Open Access data and software Use of ICT in teaching, laboratory education, communication with students TEACHING ORGANIZATION Activity Semester workload The manner and methods of teaching are **Interactive Teaching Lectures** 39 described in detail. (13X3 hours) Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography,

4		
	tutorials, placements, clinical practice, art	Locating data a
	workshop, interactive teaching, educational	sources
	visits, project, essay writing, artistic creativity, etc.	Data analysis
		Rusiness Plann

The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS

Locating data and information	20
sources	20
Data analysis	18
Business Planning	42
Drafting/writing a paper	28
Total number of hours for the Course (25 hours of work-load per ECTS credit)	150 hours (total student work-load)

### STUDENT ASSESSMENT

Description of the evaluation procedure

Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, openended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other

Specifically-defined evaluation criteria are given, and if and where they are accessible to students.

The knowledge and skills acquired by the students are evaluated through the process of preparing an individual or group assignment, which consists of defined stages that are presented and analyzed in the classroom. The score is distributed as follows:

- in the oral presentation of an innovative Business Idea based on a structured analysis (25% of the grade in the course) and
- preparing and submitting a detailed business plan (75% of the grade in the course)

#### 5. ATTACHED BIBLIOGRAPHY

- Required textbook:
- Related Journals:

#### **TEXTBOOK**

Σταμπουλής, Γ. & Τσίτσκαρη, Έ. (Επιμ) (2020) Επιχειρηματικότητα: Νοοτροπία και πρακτική (σελ. 552) ΚΡΙΤΙΚΗ, (ISBN: 9789605863418)

Κωδικός Εύδοξου: 94645251

Μετάφραση του:

Heidi M. Neck, Christopher P. Neck & Emma L. Murray (2017) *Entrepreneurship: The Practice and Mindset*. SAGE

### **OPEN EDUCATIONAL RESOURCES**

Drucker, P. F. (2006) Innovation and Entrepreneurship. Harper

GEM Global Entrepreneurship Monitor Reports (http://www.gemconsortium.org/report)

Journal of Small Business & Entrepreneurship, Taylor & Francis Online International Journal of Business Innovation and Research, Inderscience Publishers

### **SPECIAL ISSUES OF POLITICAL ECONOMY**

### **COURSE OUTLINE**

TI GETTE	W GEI WEIGHE					
SCHOOL	SCHOOL OF I	SCHOOL OF ECONOMICS AND BUSINESS				
DEPARTMENT	<b>BUSINESS AI</b>	DMINISTRATIO	ON			
LEVEL OF	UNDERGRAD	DUATE				
COURSE						
COURSE CODE	ECO_DE225	ECO_DE225   SEMESTER   5 <sup>th</sup>				
		OF				
		STUDIES				
COURSE TITLE	URSE TITLE SPECIAL ISSUES OF POLITICAL ECONOMY					
INDEPENDENT TEACHING ACTIVITIES TEACHING						
if credits are awarde	if credits are awarded for separate components of the			ECTS CREDITS		
course, e.g. lectures, laboratory exercises, etc. If the			PER WEEK			

credits are awarded fo	r the whole of the course, give the					
	g hours and the total credits					
	Lectures	3	5			
Add rows if necessary.	The organisation of teaching and					
the teaching methods i	used are described in detail at (d).					
COURSE TYPE	Field of science					
general background,						
special background,						
specialised general						
knowledge, skills development						
PREREQUISITE	There are no prorequisite cours	og: guffigiont bo	alcaround knowladge on			
_	1 1	There are no prerequisite courses: sufficient background knowledge on				
COURSES:	Economic Science (Microeconomics, Macroeconomics, Public Economics,					
	Political Economy) is required.					
TEACHING						
AND	AND Greek					
ASSESSMENT						
LANGUAGE:						
THE COURSE						
IS OFFERED						
TO ERASMUS						
STUDENTS	ENTS					
COURSE	https://eclass.upatras.gr/courses	s/BMA524/	_			
WEBPAGE						
(URL)						

#### **Leraning outcomes**

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

Consult Appendix A

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

Knowledge of specific areas of political economy, with emphasis on the labour theory of value, the Marxist theory of modes of production and social classess, the theory of economic crises and uneven development.

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

- 1. Basic concepts of the labour theory of value.
- 2. The Marxist notion of modes of production and social classes.
- 3. Aspects of the Marxian theory of economic crises.
- 4. Issues related to international economic competition and development inequality at the international level.
- 5. Heterodox theoretical approaches to Foreign Direct Investment.

#### **General Abilities**

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

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

Project planning and management Respect for difference and multiculturalism Respect for the natural environment

Adapting to new situations Showing social, professional and ethical responsibility and sensitivity to

Decision-making gender issues

Working independently Criticism and self-criticism

Team work Production of free, creative and inductive thinking

Working in an international environment

Working in an interdisciplinary environment

Production of new research ideas

.....

Search for, analysis and synthesis of data and

information, with the use of the necessary technology	
Adapting to new situations	
Decision-making	
Working independently	x
Team work	
Working in an international environment	
Working in an interdisciplinary environment	
Production of new research ideas	
Project planning and management	
Respect for difference and multiculturalism	
Respect for the natural environment	
Showing social, professional and ethical responsibility and sensitivity to gender issues	
Criticism and self-criticism	X
Production of free, creative and inductive thinking	X

Others:

## 3. COURSE CONTENT

- 1. Basic concepts of the labour theory of value.
- 2. Theory of modes of production and social classes.
- 3. Capitalist Mode of Production and theory of economic crises.
- 4. Intra- and inter-sectoral competition (terms of trade) and value appropriation in the sphere of circulation.
- 5. Issues of economic development: the concept of "extraverted" development.
- 6. Theory of Foreign Direct Investment.

TEACHING METHOD	Face to face	x
Face-to-face, Distance learning, etc.	Distance learning (asynchronous)	
	Distance learning (synchronous)	
	Others:	
USE OF	Slides	
INFORMATION	E-class	X
AND	Virtual (simulated) laboratory	
COMMUNICATIO	training	
N	Others	
TECHNOLOGIES		
Use of ICT in teaching, laboratory education,		
communication with		
students		
TEACHING	Activity	Semester Workload
ORGANIZATION	Lectures	39
The manner and methods	Tutorials	
of teaching are described in detail.	Laboratory practice	
Lectures, seminars,	Essay writing	
laboratory practice,	Seminars	
fieldwork, study and	Exercises	
analysis of bibliography,		-

	Π				1
tutorials, placements, clinical practice, art	Project				
clinical practice, art workshop, interactive	Study and analysis of l	oibliography			
teaching, educational	Placements				
visits, project, essay	Clinical practice				
writing, artistic creativity,	Art workshop				
etc.	Interactive teaching				
The student's study hours	Educational visits				
for each learning activity	Artistic creativity				
are given as well as the	Private study			86	
hours of non-directed	Others:				
study according to the	Total number of hour	s for the Cou	urse	125 hours (total student	•
principles of the ECTS	(25 hours of work-loa			work-load)	
STUDENT	Written work,	X	100%		
ASSESSMENT	essay/report				
Description of the					
evaluation procedure					
Language of evaluation,	Problem solving				1
methods of evaluation,			1		
summative or conclusive,			1		
multiple choice					
questionnaires, short- answer questions, open-	Multiple		1		+
ended questions, problem	choice				
solving, written work,	questionnaires				
essay/report, oral	questionnaires				
examination, public	Einel annu mitt				+
presentation, laboratory work, clinical examination	Final exam with				
of patient, art	Multiple				
interpretation, other	choice				
Specifically-defined	questionnaires				_
evaluation criteria are	Oral examination				
given, and if and where					
they are accessible to students.					
students.					
	Clinical examination				
	of patient				
	Mid-term exam				T
	(concluding)				
	Final exam with				+
	developing questions				
	developing questions				
	Dublio pre santatian				+
	Public presentation				
	201		1		$\downarrow$
	Mid-term exam				
	(formative)		1		
			<u> </u>		
	Laboratory work				T
	]		1		

Art interpretation		
		_
Others:		

#### 5. RECOMMENDED LITERATURE

- 1. Οικονομάκης, Γ. (2016), Ειδικά Θέματα Πολιτικής Οικονομίας και Ποσοτική Ανάλυση: Σημειώσεις, Τμήμα Ι: Βασικό Θεωρητικό Πλαίσιο, Πάτρα: Πανεπιστήμιο Πατρών.
- 2. Οικονομάκης Γ. Η. (2000), Ιστορικοί Τρόποι Παραγωγής, Καπιταλιστικό Σύστημα και Γεωργία, Αθήνα: Ελληνικά Γράμματα.
- 3. Σημειώσεις και άρθρα σε e-class.

# THIRD YEAR, 6th Semester (Spring)

## **PUBLIC ECONOMICS**

## **COURSE OUTLINE**

#### 1. GENERAL

I. GENERAL				
SCHOOL	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS			
LEVEL OF COURSE	UNDERGRA	DUATE		
COURSE CODE	ECO_312	ECO_312 SEMESTER OF 6th		
			STUDIES	
COURSE TITLE	PUBLIC ECO	NOMICS		
INDEPENDENT TEACH	ING ACTIVIT	TES	TEACHING	
			HOURS	ECTS CREDITS
			PER WEEK	
Lectures			3	6
COURSE TYPE	Field of Scie	nce, Gener	al knowledge	
PREREQUISITE COURSES:	Suggested prerequisites: Microeconomics I and II.			
TEACHING AND	Greek			
ASSESSMENT LANGUAGE:				
THE COURSE IS OFFERED	No			
TO ERASMUS STUDENTS				
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1513/			

### 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.

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.

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.

#### **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
- Decision making
- Advancement of independent, creative and inductive thinking
- Independent work
- Team work

#### 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.

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

4. I EAUTING AND LEARNING	METHODS - ASSESSMENT					
TEACHING METHOD	Face to face class lectures					
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	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.					
TEACHING ORGANIZATION	Activity	Semester workload				
	Class lectures and seminars	39 hours (3*13)				
	Study at home 111 hours					
	Total number of hours for the 150 hours (total					
	Course (25 hours of work-load   student work-load)					
	per ECTS credit)					
STUDENT ASSESSMENT	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

SCHOOL	ECONOMICS	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRA	DUATE			
COURSE CODE	ECO_350	ECO_350 <b>SEMESTER OF</b> 6 <sup>th</sup>			
			STUDIES		
COURSE TITLE	ECONOMIC POLICY				
INDEPENDENT TEACHING ACTIVITIES			TEACHING HOURS PER WEEK	ECTS CREDITS	
		Lectures	3	6	
COURSE TYPE	Field of Scie				
PREREQUISITE COURSES:	Suggested prerequisites: Macroeconomics II, Microeconomics II				
TEACHING AND ASSESSMENT LANGUAGE:	Greek				
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No				
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1418/				

#### 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.

TEACHING METHOD	Face to face lectures
-----------------	-----------------------

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

#### -Recommended Literature:

- Baldwin, R. Wyplosz, C. 2024. The Economics of European Integration. . TZIOLA Publications.
- Vavouras, I. Vavoura, C. 2019. Economic Policy. Papazisis Publishers. (in greek)
- Tamourantzis A. 2023. Economic Policy and Governance in the Eurozone. TZIOLA Publications. (in greek)
- Scarth W. 2011. Modern Economics. Gutenberg Publications. (in greek)

#### -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: <a href="http://www.bankofgreece.gr">http://www.bankofgreece.gr</a>

Hellenic Republic, Ministry of Finance: <a href="http://www.minfin.gr">http://www.minfin.gr</a>

Parliamentary Budget Office: <a href="http://www.pbo.gr/el-gr/">http://www.pbo.gr/el-gr/</a>

International Monetary Fund: <a href="http://www.imf.org">http://www.imf.org</a>

European Commission, DG Economic and Financial Affairs:

https://ec.europa.eu/info/departments/economic-and-financial-affairs\_en

European Central Bank: <a href="https://www.ecb.europa.eu">https://www.ecb.europa.eu</a>

OECD Economics Department: http://www.oecd.org/eco/http://www.oecd-ilibrary.org/economics/oecd-economics-department-working-papers 18151973

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

Financial Times: <a href="https://www.ft.com">https://www.ft.com</a>

The Economist: <a href="https://www.economist.com">https://www.economist.com</a>

#### **GREEK ECONOMIC HISTORY**

#### **COURSE OUTLINE**

#### 1. GENERAL

SCHOOL	ECONOMICS	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRA	DUATE			
COURSE CODE	ECO_230 SEMESTER OF STUDIES			6 <sup>th</sup>	
COURSE TITLE	GREEK ECO	NOMIC HIS	TORY		
INDEPENDENT TEACH	ING ACTIVIT	TIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
		Lectures	3	6	
COURSE TYPE	Field of Economics Science				
PREREQUISITE COURSES:	Suggested P	rereanisite	15.		
1111112 00 0110201	Economic H	_			
TEACHING AND	Greek				
ASSESSMENT LANGUAGE:					
THE COURSE IS OFFERED	No				
TO ERASMUS STUDENTS					
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1389/				

#### 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 interwar period. Post-war economic developments in Greece.

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

- Suggested bibliography:
- -In Greek:
- Κ. Κωστής-Σ. Πετμεζάς (επιμέλεια), Η Ανάπτυξη της Ελληνικής Οικονομίας τον 19ο Αιώνα, εκδόσεις Αλεξάνδρεια, 2006
- Β. 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.

- Scientific Journals:

Ιστορικά (In Greek), European Review of Economic History

## FINANCIAL ANALYSIS & MANAGEMENT

## **COURSE OUTLINE**

••	GLILLIAL					
	SCHOOL	ECONOMICS 8	ECONOMICS & BUSINESS			
	DEPARTMENT	ECONOMICS				
	LEVEL OF COURSE	UNDERGRAD	UATE			
	COURSE CODE	ECO_332	SEMESTE	R OF STUDIES 6 <sup>t</sup>	h	
	COURSE TITLE	FINANCIAL A	NALYSIS & M	ANAGEMENT		
	INDEPENDENTTEACHINGACTIVITIES  TEACHING HOURS PER WEEK  TEACHING HOURS PER WEEK					
	Lectures and tutorials			3 (lect.) 1 (tut.)	6	
	COURSE TYPE	Skills develop	ment			
	PREREQUISITE COURSES:	Suggested prerequisites: Accounting I & II				
_	TEACHING AND					
	ASSESSMENT	Greek				
	LANGUAGE:					
	THE COURSE IS	No				
	OFFERED TO					

ERASMUS	
STUDENTS	
COURSE WEBPAGE	https://eclass.upatras.gr/courses/ECON1280/
(URL)	

#### **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

TEACHINGMETHOD	Face-to-face	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of Information and Communication Technologies (ICTs) (e.g. powerpoint) in teaching and communicating with students.	
TEACHING	Activity	Semester workload
ORGANIZATION	Lectures	39 hours
	Workshop	(13 hours
	Study and analysis of the literature	46 hours
	Project writing and problem sets solving	52 hours
	Total number of hours for the Course (25 hours of work-load per ECTS credit)	150 hours (total student work-load)
STUDENT ASSESSMENT	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:
	https://eclass.upatras.gr/modules/document/?course=ECON1280

#### 5. RECOMMENDED LITERATURE

#### -Recommended Literature :

"Financial Reporting, Financial Statement Analysis and Valuation", WAHLEN, BAGINSKI AND BRADSHAW, Cengage Learning, 2022.

"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 (<a href="https://aaahq.org/">https://aaahq.org/</a>)

British Accounting Association (<a href="https://bafa.ac.uk/">https://bafa.ac.uk/</a>)

CFA Institute (<a href="https://www.cfainstitute.org/">https://www.cfainstitute.org/</a>)

European Accounting Association (<a href="https://eaa-online.org/">https://eaa-online.org/</a>)

Business Week (<a href="https://www.bloomberg.com/businessweek">https://www.bloomberg.com/businessweek</a>)

The Economist (<a href="https://www.economist.com/">https://www.economist.com/</a>)

Eurostat (https://ec.europa.eu/eurostat)

Financial Times (<a href="https://www.ft.com/">https://www.ft.com/</a>)

Google Finance (<a href="https://www.google.com/finance">https://www.google.com/finance</a>)

Reuters (<a href="https://www.reuters.com/">https://www.reuters.com/</a>)

Yahoo! Finance (<a href="https://finance.yahoo.com/">https://finance.yahoo.com/</a>)

Committee of European Securities Regulators (https://www.esma.europa.eu/)

European Union (<a href="https://european-union.europa.eu/">https://european-union.europa.eu/</a>)

International Accounting Standards Board (IASB) (<a href="https://www.ifrs.org/groups/international-accounting-standards-board/">https://www.ifrs.org/groups/international-accounting-standards-board/</a>)

## OPERATIONAL RESEARCH

## **COURSE OUTLINE**

SCHOOL	ECONOMICS & BUSINESS				
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRA	DUATE			
COURSE CODE	ECO_352 SEMESTER OF 6th			6 <sup>th</sup>	
	STUDIES				
COURSE TITLE	OPERATIONAL RESEARCH				
INDEPENDENT TEACHING ACTIVITIES			TEACHING HOURS PER WEEK	ECTS CREDITS	
Lectures and tutorials			3 (lect.)	6	
			2 (tut.)		

COURSE TYPE	Field of Science and Skills Development			
	•			
PREREQUISITE COURSES:	Suggested prerequisite: Mathematics for Economists I & II			
TEACHING AND	Greek			
ASSESSMENT LANGUAGE:				
THE COURSE IS OFFERED	No			
TO ERASMUS STUDENTS				
COURSE WEBPAGE (URL) https://eclass.upatras.gr/courses/ECON1281/				
	https://eclass.upatras.gr/courses/ECON1318/			

#### **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

- TEACHING AND LEARNING METHODS - ASSESSMENT					
TEACHING METHOD	a) Lectures and tutorials and face to fa	ace.			
	b) Supplementary learning based on the material of the open course entitled "Operational Research (Applications with R Software)"				
	(https://eclass.upatras.gr/courses/E0	CON1318/)			
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	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.				
TEACHING ORGANIZATION	Activity	Semester workload			
	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				
	Hours for private study	85 hours			
	Total number of hours for the Course (25 hours of work-load per ECTS credit)  150 hours (total student work-load)				
STUDENT ASSESSMENT					

## 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

Coletsos, I., Stoggianis, D., Introduction to Operational research, Edition 2nd, 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://emeraldgrouppublishing.com/ijopm.htm

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

## **TOPICS OF ECONOMIC GEOGRAPHY**

## **COURSE OUTLINE**

#### 1. GENERAL

I, GERERAL				
SCHOOL	ECONOMICS AND BUSINESS			
DEPARTMENT	ECONOMICS			
LEVEL OF COURSE	UNDERGRADUATE			
COURSE CODE	ECO_356 SEMESTER OF STUDIES 6th			6 <sup>th</sup>
COURSE TITLE	TOPICS OF ECONOMIC GEOGRAPHY			
INDEPENDENT TEACHING ACTIVITIES  if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits			TEACHING HOURS PER WEEK	ECTS CREDITS
		Lectures	3	6
Add rows if necessary. The organisation teaching methods used are described	, ,	nd the		
COURSE TYPE general background, special background, specialised general knowledge, skills development	Scientific area			
PREREQUISITE COURSES:	No			
TEACHING AND ASSESSMENT LANGUAGE:	Greek			
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No			
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1512/			

#### 2. LEARNING OUTCOMES

## **Learning outcomes**

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

Consult Appendix A

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

Students are invited to delve into current issues of Economic Geography, with an emphasis on global economic restructuring triggered by the restructuring of production factors.

The aim is to understand the processes of crisis/restructuring of production and the resulting spatial rearrangements, as they are reflected in the global shift of centers of accumulation and development.

#### **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, Project planning and management with the use of the necessary technology Respect for difference and multiculturalism

Adapting to new situations Respect for the natural environment Decision-making

Showing social, professional and ethical responsibility and sensitivity to Working independently

gender issues

Team work Criticism and self-criticism

Working in an international environment Production of free, creative and inductive thinking

Working in an interdisciplinary environment Production of new research ideas Others...

## 3. COURSE CONTENT

The course focuses on the Global Shift and the multi-dimensional developments it initiates. It is about the transformation of the economy through global production networks, which include multinational corporations, national governments, supranational organizations, interest groups and technological developments.

The issues that emerge from this process are analyzed in the following teaching units:

- The shift in the global economic center of gravity in manufacturing and services today (towards India and China) – The changes it brings for the developed and emerging world
- The restructuring of economic activity and production factors The new geography of manufacturing and services - The relocation of production lines, distribution centers, consumption, and investments
- Τα αίτια επιτάχυνσης της Παγκόσμιας Μετατόπισης και οι επιπτώσεις για τον ανεπτυγμένο και τον αναπτυσσόμενο κόσμο - Ο ρόλος των πολυεθνικών εταιρειών, των κρατών, της εργασίας, των καταναλωτών, της κοινωνία των πολιτών και οι αλληλεπιδράσεις τους
- The winners and losers of Globalization Where is the Value created in global production networks concentrated?

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

" I Eliferin (e in te en in te in te	THE PROPERTY I	
TEACHING METHOD Face-to-face, Distance learning, etc.	Lectures	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, laboratory education, communication with students		
TEACHING ORGANIZATION	Activity	Semester workload
The manner and methods of teaching are described in detail.  Lectures, seminars, laboratory practice,	Lectures and Interactive teaching (3 hours/week x 13 weeks)	39 hours
fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.	Independent study (including the study for the preparation of assignments)	111 hours
The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the		
ECTS	Total number of hours for the Course (25 hours of work-load per ECTS credit)	150 hours (total student work-load)
STUDENT ASSESSMENT	Written final exam with development q	uestions.
Description of the evaluation procedure	It is possible to combine the written fi	-
Language of evaluation, methods of evaluation,	group or individual assignment (corresponde in the course) with a mandatory	_

grade in the course), with a mandatory oral presentation in class.

summative or conclusive, multiple choice

questionnaires, short-answer questions, open- ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other
Specifically-defined evaluation criteria are given,
and if and where they are accessible to students.

## 5. ATTACHED BIBLIOGRAPHY

- Required textbook:
- Related Journals:

## **TEXTBOOKS**

Global Shift: Mapping the Changing Contours of the World Economy (Seventh Edition) by Peter Dicken (Author)

Gordon L. Clark, Maryann P. Feldman, Meric S. Gertler, and Dariusz Wojcik (Eds) 2018. The New Oxford Handbook of Economic Geography. Oxford University Press (2nd edition).

## OPEN EDUCATIONAL RESOURCES

Journal of Economic Geography, Oxford Academic

Cambridge Journal of Regions, Economy and Society, Oxford academic Regional Studies

## **REGIONAL ECONOMICS**

## **COURSE OUTLINE**

#### 1. GENERAL

I. GENERAL				
SCHOOL	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS			
LEVEL OF COURSE	UNDERGRADUATE			
COURSE CODE	ECO 361			
			STUDIES	
COURSE TITLE	REGIONAL I	ECONOMIC	S	
INDEPENDENT TEACHING ACTIVITIES			TEACHING HOURS PER WEEK	ECTS CREDITS
		Lectures	3	6
COURSE TYPE	Field of Economic Science			
PREREQUISITE COURSES:	Suggested p	rerequisite	es: Principles of	Economics I,
	Microeconomics I and II.			
TEACHING AND	Greek			
ASSESSMENT LANGUAGE:				
THE COURSE IS OFFERED	No			
TO ERASMUS STUDENTS				
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1478/			

# 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 regional economy and the regional level of economic activity
- the impact of economic policy on the regions
- the concepts of convergence, divergence and regional growth
- methods in regional economics and in particular for analyzing the impact of economic activity on the regional economy
- the impact of innovation and R & D on regional development

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.

Students should also be able:

- to use the above knowledge to approach regional development issues (sectoral or economywide) including the use of regional development incentives in the private and public sectors
- 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.
- 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.

#### **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?

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. 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

TEACHING METHOD	Face to face					
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of e-class for storing education material and communicating with students.					
TEACHING ORGANIZATION	Activity	Semester workload				
	Lectures	39 hours (3x13)				
	Non-guided study	111 hours				
	Total number of hours for the Course (25 hours of work-load per ECTS credit)	150 hours (total student work-load)				
STUDENT ASSESSMENT	1. End of semester final written exam					

#### 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 LAW AND LABOUR RELATIONS

# **COURSE OUTLINE**

SCHOOL	ECONOMICS & BUSINESS				
DEPARTMENT	BUSINESS ADMINISTRATION				
LEVEL OF COURSE	UNDERGRADU	JATE			
COURSE CODE	ECO_DE205	SEMEST	ER OF STUDIES	6 <sup>th</sup>	
COURSE TITLE	LABOUR LAW	AND LAB	OUR RELATIONS		
INDEPENDENT TEACHING ACTIVITIES			TEACHING		
INDEPENDENT TEAC	HING ACTIVITI	ES	TEACHING HOURS PER WEEK	ECTS CREDITS	
INDEPENDENT TEAC		<b>ES</b> Lectures	HOURS	ECTS CREDITS  6	
INDEPENDENT TEAC			HOURS PER WEEK		

PREREQUISITE COURSES:	There are no prerequisite courses.
TEACHING AND	Greek
ASSESSMENT LANGUAGE:	
THE COURSE IS OFFERED	No
TO ERASMUS STUDENTS	
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/BMA552/

## **Learning outcomes**

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

## **General Abilities**

#### 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

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

STUDENT ASSESSMENT	Final exam with developing questions

## 5. RECOMMENDED LITERATURE (in Greek)

- Ι. Κουκιάδης, Εργατικό Δίκαιο Επιτομή, 6η εκδ. Σάκκουλας, 2017
- Π. Αγαλλοπούλου, Εισαγωγή στο Εργατικό Δίκαιο, 4η εκδ., Σάκκουλας, 2014
- Χ. Τσενέ, σημειώσεις μαθήματος E-class.

## **SPECIAL TOPICS IN MACROECONOMICS**

## **COURSE OUTLINE**

#### 1. GENERAL

SCHOOL	ECONOMICS	& BIISINE	iss.		
DEPARTMENT	ECONOMICS & BOSINESS				
LEVELOF COURSE	UNDERGRA	DUATE			
COURSE CODE	ECO_492	S	EMESTER OF	6 <sup>th</sup>	
		STUDIES			
COURSE TITLE	SPECIAL TO	SPECIAL TOPICS IN MACROECONOMICS			
INDEPENDENTTEACH	HINGACTIVITIES TEACHING HOURS PER WEEK  TEACHING ECTS CREDITS				
	Lectures 3 6				
COURSE TYPE	Economics Science				
PREREQUISITE COURSES:	Suggested prerequisites: Macroeconomics I & II				
TEACHING AND ASSESSMENT LANGUAGE:	Greek				
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No				
COURSE WEBPAGE (URL)	https://eclass	.upatras.gr/	courses/ECON14	<u>72/</u>	

#### 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

TEACHINGMETHOD	Face to face			
USE OF INFORMATION AND	Use of IT in teaching, and in commun	ication with the students		
COMMUNICATIONS	(e-class)			
	(e class)			
TECHNOLOGY				
TEACHING ORGANIZATION	Activity Semester workload			
	Lectures. 13X3 = 39 hours			
	Reading at home 111 hours			
	Total number of hours for the 150 hours (total			
	Course (25 hours of work-load student work-load) per ECTS credit)			
CONTRACTOR A COROCO ADDITION				
STUDENT ASSESSMENT				

## **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**

SCHOOL	ECONOMICS & BUSINESS
DEPARTMENT	BUSINESS ADMINISTRATION
LEVEL OF COURSE	UNDERGRADUATE

COURSE CODE	ECO_DE141	SE	MESTER OF STUDIES	SIXTH
COURSE TITLE	SIMULATION OF BUSINESS PROCESSES			
INDEPENDENT TEAC	NDENT TEACHING ACTIVITIES			ECTS CREDITS
		Lectures	3	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	No			
TO ERASMUS STUDENTS				
COURSE WEBPAGE (URL)	https://eclas	s.upatras.gr	/courses/BMA	<u>416/</u>

## **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:

- 1. Design a simulation model for a particular system under examination.
- 2. Implement the model using commercially available software.
- 3. Design the experiments required in order to study the system under consideration.
- 4. Analyze and interpret the results of the simulation.

#### **General Abilities**

- 1. Implementation of models using the EXTEND package.
- 2. Statistical analysis of simulation results.
- 3. Reporting and presenting the results.

## 3. COURSE CONTENT

- 1. The concept of simulation
- 2. Discrete Event Simulation
- 3. Random Numbers
- 4. Business simulation
- 5. Model testing and validation
- 6. Planning and analysis of simulation output
- 7. Applications

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

TEACHING METHOD	Lectures and laboratory work face to face.
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<b>USE OF INFORMATION AND</b>
COMMUNICATION
TECHNOLOGIES

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)

TEACHING ORGANIZATION	Activity	Semester workload
	Lectures (2 contact hours per	26
	week x 13 weeks)	
	Laboratories (2 contact hours per	
	week x 13 weeks) - designing and	26
	implementing simulation models	
	Group assignment related to	50
	simulating a realistic system and	
	writing a relevant report	
	Hours for private study of the	48
	student and preparation of home-	
	works	
	Total number of hours for the	150 hours (total

#### STUDENT ASSESSMENT

I. Final written exam (40%) which includes:

Course (25 hours of work-load

- Theoretical questions
- Practical exercises

per ECTS credit)

### II. Group project (60%)

 The group project concerns the design and development of a simulation model describing a realistic system. Students develop the problem gradually, as the required topics are presented in the lectures.

student work-load)

The group project is compulsory.

#### 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", 5th 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

#### INTERNATIONAL TRADE THEORY & POLICY

## **COURSE OUTLINE**

#### 1. GENERAL

I. UENEKAL				
SCHOOL	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS			
LEVEL OF COURSE	UNDERGRA	DUATE		
COURSE CODE	ECO_430 SEMESTER OF STUDIES 7th			7 <sup>th</sup>
COURSE TITLE	INTERNATIONAL TRADE THEORY & POLICY			
INDEPENDENT TEACH	HING ACTIVITIES  TEACH HOUR PER WI			ECTS CREDITS
Lectures and tutorials			3 (lect.), 1(tut.)	6
COURSE TYPE	Basic Economic Science			
PREREQUISITE COURSES:	Suggested prerequisites: Introduction to Economics I and II, Microeconomics I and II.			
TEACHING AND ASSESSMENT LANGUAGE:	Greek			
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No		·	
COURSE WEBPAGE (URL)	https://eclass	.upatras.gr/	courses/ECON15	520/

#### 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
- to develop skills needed 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?

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:

- Developing skills in the search, analysis and synthesis of commercial data and information
- Analyzing adjustments to the economic framework brought by globalization
- Integrating into the decision-making process the international trade
- Enhancing the knowledge of the international environment of globalization
- Embedding professional and ethical responsibility.

#### 3. COURSE CONTENT

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 Stopler - 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.

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

METHODS - ASSESSMENT			
Face-to-Face			
Use of e-class for storing ed	lucation material and		
communicating with students.			
G			
Activity	Semester workload		
Lectures	39 hours (3x13)		
Tutorials	13 hours (1x13)		
Individual study 98 hours			
Total number of hours for the 150 hours (total			
Course (25 hours of work-load   student work-load)			
per ECTS credit)	,		
Written final exam that may include r	nultiple choice questions,		
short answer questions, solving exercises, financial			
interpretation of results. The final grade of the course results			
from the performance in the final exam. In case the students			
•			
	Face-to-Face  Use of e-class for storing excommunicating with students.  Activity  Lectures  Tutorials  Individual study  Total number of hours for the Course (25 hours of work-load per ECTS credit)  Written final exam that may include a short answer questions, solvin interpretation of results. The final gr		

#### 5. ATTACHED BIBLIOGRAPHY

-Books (in Greek):

Krugman Paul, Obstfeld Maurice, Melitz Marc.2016. Διεθνής οικονομική. Εκδόσεις Κριτική, Κωδικός Εύδοξος: 59367851

Dominick Salvatore. 2017. Διεθνής Οικονομική, Εκδόσεις Τζιόλα. Κωδικός Εύδοξος: 59383046.

Feenstra Robert, Taylor Alan. 2012 Διεθνής Οικονομική. Εκδόσεις Επίκεντρο, Κωδικός Εύδοξος: 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

SCHOOL	ECONOMICS	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS	ECONOMICS			
LEVEL OF COURSE	UNDERGRA	DUATE			
COURSE CODE	ECO_410	S	EMESTER OF	7 <sup>th</sup>	
			STUDIES		
COURSE TITLE	DEVELOPM	DEVELOPMENT ECONOMICS			
INDEPENDENT TEACH	INDEPENDENT TEACHING ACTIVITIES TEACHING				
	HOURS PER WEE			ECTS CREDITS	
	Lectures 3 6				
COURSE TYPE	Field of Science				
PREREQUISITE COURSES:	Suggested prerequisites: Macroeconomics I, Macroeconomics II,				
	Microeconomics II				
TEACHING AND	Greek				
ASSESSMENT LANGUAGE:					
THE COURSE IS OFFERED	Offered to ERASMUS through lectures and exams in English				
TO ERASMUS STUDENTS					
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1406/				

#### 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. Urbanization and rural-urban migration. Structural transformation and development. External financing, investment and aid. Development and Policy in Developing Countries.

# 4. TEACHING AND LEARNING METHODS - ASSESSMENT

4. TEACHING AND LEARNING	METHUDS - ASSESSMENT			
TEACHING METHOD	Face to face			
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of ICT in teaching and communication with students through the e-class platform			
TEACHING ORGANIZATION	Activity Semester workload			
	Lectures	39 hours (3X13)		
	Private study 111 hours			
	Total number of hours for the 150 hours (total			
	Course (25 hours of work-load student work-load) per ECTS credit)			
STUDENT ASSESSMENT	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 2 points.			

#### 5. ATTACHED BIBLIOGRAPHY

-Suggested bibliography:

- Todaro M. P. and Smith S. C. 2020. Economic Development. Pearson (13th Edition).
- De Janvry, A. and Sadoulet, E., 2021. Development Economics: Theory and Practice. Routledge (2<sup>nd</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: <a href="https://ourworldindata.org">https://ourworldindata.org</a>

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: <a href="https://www.worldbank.org/">https://www.worldbank.org/en/research</a>

United Nations: <a href="https://www.un.org/millenniumgoals/">https://www.un.org/millenniumgoals/</a>

https://www.un.org/sustainabledevelopment/sustainable-development-goals/

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

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

International Fund for Agricultural Development: <a href="https://www.ifad.org">https://www.ifad.org</a>

Paul Romer website: <a href="https://paulromer.net">https://paulromer.net</a>

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: <a href="https://www.economist.com">https://www.economist.com</a>

## **DATA ANALYSIS**

## **COURSE OUTLINE**

#### 1. GENERAL

SCHOOL	ECONOMICS	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRA	DUATE			
COURSE CODE	ECO_351	S	EMESTER OF	7 <sup>th</sup>	
		STUDIES			
COURSE TITLE	DATA ANAL	YSIS			
INDEPENDENT TEACH	HING ACTIVITIES  TEACHING HOURS PER WEEK  TEACHING ECTS CREDITS			ECTS CREDITS	
	Lectures and	tutorials	3 (lect.) 1 (tut.)	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)	https://ecla	ss.upatras.	gr/courses/EC	<u>ON1260/</u>	

### 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 enable students to expand and deepen their knowledge and skills in various areas of statistics and of statistical analysis of large data sets.

After completing the course, the student will:

- Have a solid knowledge of statistical methodologies and techniques for analysing large data sets
- Be able to process and describe the information contained in large data sets.
- Have an in-depth understanding of the mechanisms that justify the choice of one method over another.
- Be able to select and use the basic statistical data analysis tools using the SPSS statistical software.
- Be able to interpret correctly the software graphs and results.
- Solve problems with real-world data by using an interdisciplinary approach.

## **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?

- Practical application of knowledge
- Data and information search, analysis and synthesis, using the appropriate technologies
- Autonomous work
- Team work
- Work in an interdisciplinary environment
- · Promotion of free, creative and inductive thinking

#### 3. COURSE CONTENT

- Towards a Philosophy of Data Analysis.
- Data management, data sources, sample and population, measurement and nature of variables, coding, data entry and data cleaning, extreme values, missing values.
- Univariate and bivariate statistical analysis Constructing Graphical Displays Contingency tables Correlation Hypothesis tests Analysis of Variance Non parametric procedures.
- Multivariate techniques for data analysis and applications in economics.
- Distinction (reducing, clustering, interaction) of data analysis methods Factor analysis Cluster analysis.
- Overview of SPSS Using SPSS to analyze large sets of real data.

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

TEACHING METHOD	Face to face			
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	<ul> <li>Use of e-class to support teaching, laboratory work and communication with students.</li> <li>Use of SPSS Statistical software.</li> </ul>			
TEACHING ORGANIZATION	Activity Semester workload			
	Lectures	(3 x 13=) 39 hours		
	Laboratory work (1 x 13=) 13 hours			
	Self-study and project preparation 98 hours			
	Total number of hours for the 150 hours (total			
	Course (25 hours of work-load   student work-load)			
	per ECTS credit)			
STUDENT ASSESSMENT				
	Written exam at the end of the semester			
	Project (it is optional and count for 60% of the final grade)			

## 5. ATTACHED BIBLIOGRAPHY

Suggested bibliography:

- Γναρδέλλης, Χ., 2022, Ανάλυση δεδομένων με το IBM SPSS STATISTICS 28, ΕΚΔΟΣΕΙΣ ΠΑΠΑΖΗΣΗ (in Greek)
- SPSS Help system
- Field, Andy, 5th edition February 2018, Discovering Statistics Using SPSS, SAGE Publications
- Φουσκάκης, Δ., Ανάλυση Δεδομένων με χρήση της R, Εκδόσεις Τσότρας (in Greek)
- Παπαδημητρίου, Γ. 2007, Η Ανάλυση δεδομένων, Εκδόσεις: τυπωθήτω ΓΙΩΡΓΟΣ ΔΑΡΔΑΝΟΣ (in Greek)
- Καρλής, Δ. 2005, Πολυμεταβλητή Στατιστική Ανάλυση, Εκδόσεις Σταμούλη (in Greek)
- Kanji, Gopal, 2006, 100 Statistical Tests, SAGE Publications

#### Data bases:

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

 $https://stats.oecd.org/\underline{https://www.gesis.org/eurobarometer-data-service/search-data-access/data-access}$ 

http://www.statistics.gr/statistics/

## **ECONOMICS OF NATURAL RESOURCES & ENVIRONMENT**

## **COURSE OUTLINE**

## 1. GENERAL

SCHOOL	ECONOMICS & BUSINESS				
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRA	DUATE			
COURSE CODE	ECO_360	S	EMESTER OF	7 <sup>th</sup>	
	STUDIES				
COURSE TITLE	ECONOMICS	OF NATU	RAL RESOURCES	& ENVIRONMENT	
INDEPENDENT TEACH	HING ACTIVITIES  TEACHING HOURS PER WEEK  TEACHING ECTS CREDITS				
	Lectures 3 6				
COURSE TYPE	Field of Economics				
PREREQUISITE COURSES:	Suggested prerequisites:				
	Principles of Economics I & II, Microeconomics I & II				
TEACHING AND	Greek				
ASSESSMENT LANGUAGE:					
THE COURSE IS OFFERED	No				
TO ERASMUS STUDENTS					
COURSE WEBPAGE (URL)	Platform for Asynchronous Teaching e-class:				
	https://eclass.upatras.gr/courses/ECON1210/				
	Open Course	•	•		
	https://ecla	ss.upatras.	gr/courses/ECO	N1322/	

#### 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

TEACHING METHOD	Face to face				
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Webinars, and use of asynchronous educational platform eclass for storing education material and communicating with students.				
TEACHING ORGANIZATION	Activity Semester workload				
	Lectures 39 hours (3x13)				
	Individual study and webinars 111 hours				
	Total number of hours for the 150 hours (total				
	Course (25 hours of work-load   student work-load)				
	per ECTS credit)				
STUDENT ASSESSMENT					
	1. End of semester final written exam and optional				
	participation in mid-term written exams.				
	2. Mid-term exams (two written exa	ams) count for 40% of the			
	final grade.				

## 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 EDUCATION**

#### **COURSE OUTLINE**

SCHOOL	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS	5		
LEVEL OF COURSE	UNDERGRA	DUATE		
COURSE CODE	ECO_396	ECO_396 SEMESTER OF 7th		
	STUDIES			
COURSE TITLE	ECONOMICS OF EDUCATION			
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS	
		Lectures	3	6

COURSE TYPE	Field of Science		
PREREQUISITE COURSES:	Suggested prerequisite	s: Microeconomi	cs I and II,
	Macroeconomics I and	II, and Economet	rics
TEACHING AND	Greek		
ASSESSMENT LANGUAGE:			
THE COURSE IS OFFERED	No		
TO ERASMUS STUDENTS			
COURSE WEBPAGE (URL)	https://eclass.upatras.	gr/courses/ECO	<u> </u>

#### **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.
- Collect and organize the relevant empirical data needed to estimate the returns to schooling and recognize the role of externalities.
- Understand the determinants of the educational outcome at different levels of education.
- Recognize the role of accountability in education and understand models of school administration.
- Recognize the value of the multidisciplinary approach to the economics of education.
- Develop critical thinking skills in assessing competing ideas and approaches using various methods to address relevant problems.
- Develop complex writing and presentation skills for a research work on various topics of interest within the classroom.

#### **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
- Adapt to new situations
- Decision making
- Autonomous work
- Working in an international environment
- 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

- The role of education in economic science
- Demand for schooling
- Human Capital Theory
- Education as a signal
- Estimating the returns to schooling

- Class size and peer effects
- The labor market for teachers and teacher performance
- Financing education
- School choice and accountability
- Tertiary education
- Skill formation (cognitive and non-cognitive skills)
- Intergeneration mobility
- Externalities of education (crime, health, institutions)

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

TEACHING METHOD	Face-to-face	_			
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	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.				
TEACHING ORGANIZATION	Activity	Semester workload			
	Lectures (3 hours per week x 13 weeks)	39 hours			
	Individual work	111 hours			
	Total number of hours for the	150 hours (total			
	Course (25 hours of work-load   student work-load)   per ECTS credit)				
STUDENT ASSESSMENT	The assessment is based on stude written final examination (80%), of during the semester (10%), and on during the semester (10%). The examinations deals with issues concepts, comparative evaluation of solving numerical problems related course. The test is of a multiple-choice asked to choose the correct answer (45 alternative answers (per question) are described in the Course Syllabus platform e-class upatras.	on a paper presentation a mid-term examination ne content of written of understanding basic competitive theories and d to the content of the e format and students are 40 questions) from a list of ). The evaluation criteria			

## 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

## RESEARCH METHODOLOGY IN ECONOMICS

## **COURSE OUTLINE**

SCHOOL	ECONOMICS	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS				
LEVELOF COURSE	UNDERGRA	DUATE			
COURSE CODE	ECO_452	S	EMESTER OF	7 <sup>th</sup>	
		STUDIES			
COURSE TITLE	RESEARCH	METHODO	LOGY IN ECONO	MICS	
INDEPENDENTTEACH	HINGACTIVITIES TEACHING HOURS PER WEEK  TEACHING ECTS CREDITS			ECTS CREDITS	
	Lectures 3 6			6	
COURSE TYPE	Field of Science, Skills Development				
PREREQUISITE COURSES:	Suggested prerequisites: Macroeconomics I & II and				
	Microeconomics I & II				
TEACHING AND	Greek				
ASSESSMENT LANGUAGE:					
THE COURSE IS OFFERED	No				
TO ERASMUS STUDENTS					
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1519/				

#### **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 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) 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

TEACHINGMETHOD	Face to face lectures & seminars			
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of Information and Communication Technologies (ICTs) (e.g. PowerPoint) in teaching.			
TEACHING ORGANIZATION	Activity Semester workload			
	Lectures, 3 hours per week 13X3 = 39 hours			
	Private study and preparation of 111 hours			
	assignments			
	Total number of hours for the 150 hours (total			
	Course (25 hours of work-load   student work-load)			
	per ECTS credit)			
STUDENT ASSESSMENT				
	Written assignment at the end of the semester (100%)			

#### 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.

Joshua D. Angrist & Jorn-Steffen Pischke, 'Mastering metrics: The path from cause to effect, Princeton University Press, 2015

Joshua D. Angrist & Jorn-Steffen Pischke, Mostly harmless econometrics, Princeton University Press, 2009

C.F. Baum, An introduction to modern econometrics using Stata, Stata Press, 2006

#### AGRICULTURAL POLICY

#### **COURSE OUTLINE**

#### 1 GENERAL

I. GENEKAL					
SCHOOL	ECONOMICS & BUSINESS				
DEPARTMENT	ECONOMICS	ECONOMICS			
LEVEL OF COURSE	UNDERGRA	DUATE			
COURSE CODE	ECO_465	S	EMESTER OF	7 <sup>th</sup>	
	STUDIES				
COURSE TITLE	AGRICULTU	RAL ECON	OMIC POLICY		
INDEPENDENT TEACH	ING ACTIVIT	TES	TEACHING		
INDEL ENDERT TENOT		LLO	HOURS	ECTS CREDITS	
	PER WEEK				
	Lectures 3 6				
COURSE TYPE	Field of Science and Skills Development				
PREREQUISITE COURSES:	Suggested Prerequisites: Microeconomics I and II				
TTT A CHANNE A NAT					
TEACHING AND	Greek				
ASSESSMENT LANGUAGE:					
THE COURSE IS OFFERED	No				
TO ERASMUS STUDENTS					
COURSE WEBPAGE (URL)	https://eclass	.upatras.gr/	courses/ECON14	<u>49/</u>	

## 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 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.

#### **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

. I EACHING AND LEARNING ME I HODS - ASSESSMEN I					
TEACHING METHOD	Face to face class lectures				
USE OF INFORMATION AND	Support of the learning process through	h the e-class platform			
COMMUNICATIONS					
TECHNOLOGY					
TEACHING ORGANIZATION	Activity	Semester workload			
	Class lectures and seminars	3*13 = 39 hours			
	Study at home 111 hours				
	Total number of hours for the 150 hours (total				
	Course (25 hours of work-load student work-load)				
	per ECTS credit)				
STUDENT ASSESSMENT	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 pag	e, 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

## **TOPICS OF REGIONAL DEVELOPMENT**

# **COURSE OUTLINE**

SCHOOL	ECONOMICS AND BUSINESS			
DEPARTMENT	ECONOMICS			
LEVEL OF COURSE	UNDERGRADUATE			
COURSE CODE	ECO_466 SEMESTER OF 7 <sup>th</sup>			
	STUDIES			
COURSE TITLE	TOPICS OF REGIONAL DEVELOPMENT			

<sup>&</sup>quot;Agricultural Policy", P. Spathis, K. Papageorgiou, D. Damianos. Stamoulis Publishers, 2nd edition, Athens 2015

INDEPENDENT TEACHING ACTIVITIES  if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits		TEACHING HOURS PER WEEK	ECTS CREDITS
	Lectures	3	6
Add rows if necessary. The organism teaching methods used are describe	, ,		
COURSE TYPE general background, special background, specialised general knowledge, skills development	Scientific area		
PREREQUISITE COURSES:	No		
TEACHING AND ASSESSMENT LANGUAGE:	Greek		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	Yes		
COURSE WEBPAGE (URL)			

#### **Learning outcomes**

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

Consult Appendix A

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

Students are taught the main concepts of Regional Development: the Regional Problem of spatial inequalities, mobility and location of production factors.

Through the investigation and analysis of issues of regional development and competitiveness, they delve into the spatial dimension of economic activities with an emphasis on:

- interregional sectoral specialization and competitiveness
- the productive restructuring brought about by Globalization and digital technology
- the role of entrepreneurship in regional innovation and employment
- the role of networks and work skills in regional development
- the endogenous and exogenous factors of regional resilience and cohesion

In the context of the course, students gain in-depth knowledge of the current issues of interregional development, through research collecting and analyzing primary or secondary data and presenting documented research 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 Adapting to new situations

Decision-making Working independently

Team work

Working in an international environment Working in an interdisciplinary environment

Production of new research ideas

Project planning and management Respect for difference and multiculturalism Respect for the natural environment

Showing social, professional and ethical responsibility and

sensitivity to gender issues Criticism and self-criticism

Production of free, creative and inductive thinking

Others...

The course develops the students' analytical and synthetic ability to understand key developmental issues in the field of Economics. It equips them with abilities to plan and implement research, collaborate and team in an interdisciplinary environment, think critically and generate new ideas.

Specifically: search, analysis and synthesis of data and information with modern software tools, the production of new ideas, the development of autonomous and teamwork skills, the adaptation to field conditions and situations, the promotion of critical and synthetic thinking.

## 3. COURSE CONTENT

- Deepening in the theory of regional development and business competitiveness
- Formulation of research questions
- Collection and analysis of data from secondary and primary sources
- Statistical processing of research data and visualization of the results of the analysis
- Preparation of a report presenting the research results in terms of the strength and validity of the research hypotheses

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

# TEACHING METHOD

Face-to-face, Distance learning, etc.

Classroom lectures and consultation of each working group at all stages of the research

# USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY

Use of ICT in teaching, laboratory education, communication with students

Support the learning process through open access statistical analysis software and bibliography

#### TEACHING ORGANIZATION

The manner and methods of teaching are described in detail.

Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.

The student's study hours for each learning activity are given as well as the hours of nondirected study according to the principles of the ECTS

Activity	Semester workload
Lectures and Interactive teaching	39
(13X3 hours)	
Literature study and analysis	31
Fieldwork	28
Data analysis	25
Drafting/writing a paper	25
Total number of hours for the Course (25 hours of work-load per ECTS credit)	150 hours (total student work-load)

## STUDENT ASSESSMENT

Description of the evaluation procedure

Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other

Specifically-defined evaluation criteria are given, and if and where they are accessible to students.

Students submit an exempt written assignment in which the following are evaluated:

- the formulation of research questions based on the literature
- the ability to statistically analyze qualitative and quantitative data
- the presentation of coherent results and conclusions in a written research Report

#### 5. ATTACHED BIBLIOGRAPHY

- Required textbook:
- Related Journals:

## **TEXTBOOKS**

ΠΕΤΡΑΚΟΣ ΓΙΩΡΓΟΣ, ΨΥΧΑΡΗΣ ΓΙΑΝΝΗΣ (2016) ΠΕΡΙΦΕΡΕΙΑΚΗ ΑΝΑΠΤΥΞΗ ΣΤΗΝ ΕΛΛΑΔΑ. Εκδότης ΚΡΙΤΙΚΗ

ΛΑΜΠΡΙΑΝΙΔΗΣ ΛΟΗΣ (2012) ΟΙΚΟΝΟΜΙΚΗ ΓΕΩΓΡΑΦΙΑ – ΣΤΟΙΧΕΙΑ ΘΕΩΡΙΑΣ ΚΑΙ ΕΜΠΕΙΡΙΚΑ ΠΑΡΑΔΕΙΓΜΑΤΑ. Εκδότης ΠΑΤΑΚΗΣ

Gordon L. Clark, Maryann P. Feldman, Meric S. Gertler, and Dariusz Wojcik (Eds) 2018. The New Oxford Handbook of Economic Geography. Oxford University Press (2nd edition).

## OPEN EDUCATIONAL RESOURCES

Regional Studies

Journal of Regional Science

Journal of Economic Geography, Oxford Academic

Journal of Small Business & Entrepreneurship, Taylor & Francis Online

Cambridge Journal of Regions, Economy and Society, Oxford academic

#### **HEALTH ECONOMICS**

#### **COURSE OUTLINE**

#### 1. GENERAL

1. GENERAL				
SCHOOL	SCHOOL O	SCHOOL OF ECONOMICS AND BUSINESS		
DEPARTMENT	ECONOMICS			
LEVEL OF COURSE	UNDERGR	ADUATE		
COURSE CODE	ECO_473	SI	EMESTER OF	7 <sup>th</sup>
			STUDIES	
COURSE TITLE	HEALTH ECONOMICS			
INDEPENDENT TEACHING	ACTIVITIES	S	TEACHING HOURS PER WEEK	ECTS CREDITS
	Lectures			6
COURSE TYPE	SCIENTIFIC AREA			
	Managa	221021100		NOTIFICALLY BURNING
PREREQUISITE COURSES:	· · · · · · · · · · · · · · · · · · ·			
	ECONOMICS			
TEACHING AND ASSESSMENT	GREEK			
LANGUAGE:				
THE COURSE IS OFFERED TO	NO			
ERASMUS STUDENTS				
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1518/			

#### 2. LEARNING OUTCOMES

## **Leraning outcomes**

Upon successful completion of the course, students will have acquired knowledge, skills, and abilities so that they can:

- Possess advanced knowledge in the field of Health Economics, involving a critical understanding of the relevant theories and principles developed within the framework of Economic Science.
- Demonstrate their understanding in the field of Health Economics, supported by scientific textbooks that include the most contemporary developments at the forefront of Economics and Health Economics.
- Utilize the knowledge and understanding they have gained to evaluate, develop, compose, and support arguments and to solve problems within the framework of Health Economics.

- Have the ability to gather, analyze, and interpret relevant elements, typically within the fields of Economic Science and Health Economics, to formulate and shape judgments that involve considerations of social, ethical, and scientific issues related to Health Economics and their applications.
- Be able to communicate information, ideas, reflections, and solutions on issues related to Health Economics to both specialized and non-specialized audiences.
- Have developed the skills of acquiring knowledge necessary to pursue further studies in the field of Health Economics (or related fields) with a high degree of autonomy.
- Be capable of managing complex technical or professional activities or work plans for decision-making in unpredictable work or study environments related to the field of Health Economics.

#### **General Abilities**

- Search, analysis, and synthesis of data and information.
- Adaptation to new situations.
- Decision-making.
- Autonomous & collaborative work.
- Working in an international environment.
- Working in an interdisciplinary environment.
- Generation of new research ideas.
- Critical & self-critical thinking.
- Promotion of free, creative, and inductive thinking.

#### 3. COURSE CONTENT

The purpose of the course is to assist students in understanding and analyzing economic theory, particularly microeconomics, as applied to the case of supply and demand for health services. Specifically, the course provides an understanding of the economic framework within which a healthcare delivery system is shaped and financed, as well as how the outcomes of policies in the healthcare sector are evaluated. The course will introduce students to how the principles, theories, and tools of microeconomic analysis can be applied to analyze issues and problems arising in the field of health services, as well as to understand and analyze the economic behavior of consumers and healthcare providers. Indicative topics include:

- Introductory concepts in Health Economics
- Health demand, Grossman model, Wagstaff model
- Supply of health services and the industrial organization of the healthcare sector
- Principal-agent relationship in the healthcare services market, behavior of healthcare providers, reimbursement systems
- Market failures in the healthcare services sector
- Health insurance, asymmetric information
- Equality in access to healthcare services
- Pharmaceutical market
- Behavioral Economics of Health
- Special topics in Health Economics

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

FACE TO FACE	
e-class, e-mails	
Activity	Semester workload
Lectures	39
Own study & analysis of the literature	111
	e-class, e-mails  Activity  Lectures Own study & analysis of the

	Total number of hours for the Course (25 hours of work-load per ECTS credit)	150
STUDENT ASSESSEMNT		

#### 5. RECOMMENDED LITERATURE

- S. Folland, A.C. Goodman, M. Stano, The economics of Health & health care, Pearson, 6<sup>th</sup> edition
- J. Bhattacharya, T. Hyde, P. Tu, Health Economics, Red Globe Press, 2014
- S. Morris, N. Devlin, D. Parkin, A. Spencer, Economic Analysis in Health Care, Wiley, 2<sup>nd</sup> edition

## - Related academic journals:

Quarterly Journal of Economics, American Economic Review, Journal of Political Economy, Journal of Human Resources, Economic Journal, American Economic Journal: Economic Policy, European Economic Review, Journal of Health Economics, Health Economics, American Journal of Health Economics, Social Science & Medicine, Lancet Public Health.

## **CORPORATE STRATEGY I**

## **COURSE OUTLINE**

1.	GENERAL					
	SCHOOL	ECONOMICS & BUSINESS				
	DEPARTMENT	BUSINESS ADMINISTRATION				
	LEVEL OF COURSE	UNDERGRAD	UATE			
	COURSE CODE	ECO_DE413 SEMESTER OF 7th				
				STUDIES		
	COURSE TITLE	CORPORATE STRATEGY I				
	INDEPENDENT TEA	ACHING ACTIV	TEACHING HOURS PER WEEK		ECTS CREDITS	
			Lectures	3		6
	COURSE TYPE	Skills & Know	pment			
	PREREQUISITE					
	COURSES:					
	TEACHING AND					
	ASSESSMENT	Greek				
	LANGUAGE:					
	THE COURSE IS	NO				
	OFFERED TO					
	ERASMUS STUDENTS					

## **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

## **General Abilities**

Decision making

Ability to work independently and in group

Ability to adjust in new settings

Ability to analyze and synthesize evidence and information

## 3. COURSE CONTENT

- The basic concepts related to strategy and strategic management, why strategy is important? How strategy happens?
- Strategic objectives, deferent levels of strategy, competitive and corporate strategies.
- Analyzing the environment and the nature of competition, the macro-environment.
- Assessing the industry competition, industry analysis- the five forces, strategic groups, the industry life-cycle.
- Assessing the sustainability of advantage, the value chain analysis the resource-based view, assets, capabilities and competences.

- Defining the organization's vision and mission statement, values & belief systems and strategic intent fitting its strategic situation.
- Porter's generic competitive strategies.
- Strategy implementation and evaluation.

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

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

#### 5. RECOMMENDED LITERATURE

 Haberberg A., & Rieple, A. (2008). Strategic management: Theory & Application Oxford University Press.

## **Additional Readings (indicative)**

- Porter, M (1996). What is Strategy? Harvard Business Review. 74(3), November-December, 61-78.
- Porter, Michael E. (1987): "From competitive advantage to corporate strategy." *Harvard 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, 8th Semester (Spring)

## **ECONOMICS OF INDUSTRIAL ORGANIZATION**

## **COURSE OUTLINE**

	GENERAL	
SCHOOL ECONOMICS & BU		ECONOMICS & BUSINESS
	DEPARTMENT	ECONOMICS
	LEVEL OF COURSE	UNDERGRADUATE

COURSE CODE	ECO_401	S	EMESTER OF STUDIES	8 <sup>th</sup>
COURSE TITLE	ECONOMICS	OF INDUS	TRIAL ORGANI	ZATION
INDEPENDENT TEACHING ACTIVITIES		TIES	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)	https://eclass.upatras.gr/courses/ECON1217/			

#### **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 nonconvenient 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

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

# 5. ATTACHED BIBLIOGRAPHY

## -Suggested bibliography:

Carlton, D. W. and Perloff, J.M. Σύγχρονη Βιομηχανική Οργάνωση, Εκδόσεις Broken Hill Publishers, 2017. Επιμέλειας 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 Χασσιδ 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

SCHOOL	ECONOMICS	& BUSINE	SS	
DEPARTMENT	ECONOMICS			
LEVEL OF COURSE	UNDERGRA	DUATE		
COURSE CODE	ECO_420	S	EMESTER OF	8 <sup>th</sup>
			STUDIES	
COURSE TITLE	LABOUR ECONOMICS			
INDEPENDENT TEACH	INC ACTIVIT	TEC	TEACHING	
INDEPENDENT TEACH	IING ACTIVIT	IES	HOURS	ECTS CREDITS
			PER WEEK	
Lectures and tutorials		3 (lect.)	6	
COURSE TYPE	Field of Science			
PREREQUISITE COURSES:	Suggested prerequisites: Microeconomics I and II,			
	Macroeconomics I and II, and Econometrics			
TEACHING AND	Greek			
ASSESSMENT LANGUAGE:				
THE COURSE IS OFFERED	Yes (in English)			
TO ERASMUS STUDENTS				
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1277/			

## 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 of wage formation through the interaction of supply and demand forces in the labor market.
- Analyze the impact of factors that are shaped into imperfect labor markets as well as various government policies on wages and incentives to work.
- Understand the implications of the various political and economic factors in wage setting and employment
- Separate the analysis between issues related to the economic analysis of the labor market and those concerning existing labor relations.
- 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.
- Develop critical thinking skills in assessing competitive ideas and approaches using various methods of addressing relevant issues.

• Develop complex writing and presentation skills for a research work on various topics of interest within the classroom.

## **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
- Adapt to new situations
- · Decision making
- Autonomous work
- Teamwork
- Working in an international environment
- 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

- Introduction and Overview of the Labor Market
- Labor Demand and Elasticities
- Frictions in the Labor Market
- Labor Supply
- Compensating Wage Differentials
- Human Capital
- Labor Mobility
- Pay and Productivity
- Labor Market Discrimination
- Trade Unions and Labor Market
- Unemployment
- Earnings Inequality and Income
- International Trade and Labor Market

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

TEACHING METHOD	Face-to-face			
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	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.			
TEACHING ORGANIZATION	Activity	Semester workload		
	Lectures (3 hours per week x 13 weeks)	39 hours		
	Tutorials (2 hours per week x 13 26 hours weeks)			
	Individual work	85 hours		
	Total number of hours for the 150 hours (total			
	Course (25 hours of work-load   student work-load)   per ECTS credit)			
STUDENT ASSESSMENT	The assessment is based on stude	•		
	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			
	correct answer (40 questions) from			

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 Iournals

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

I. GENEKAL				
SCHOOL	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS			
LEVEL OF COURSE	UNDERGRA	DUATE		
COURSE CODE	ECO_330	S	EMESTER OF	8 <sup>th</sup>
			STUDIES	
COURSE TITLE	INVESTMENT APPRAISAL			
INDEPENDENT TEACH	TEACHING HOURS PER WEEK			ECTS CREDITS
Lectures			3	6
COURSE TYPE	Field of Science			
PREREQUISITE COURSES:	REREQUISITE COURSES: Suggested Prerequisite		es: Microeconor	nics I and II
TEACHING AND	Greek			
ASSESSMENT LANGUAGE:				
THE COURSE IS OFFERED	No			
TO ERASMUS STUDENTS				
COURSE WEBPAGE (URL)				

### 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:

- describe the key steps involved in cost-benefit analysis.
- understand the theoretical foundations of cost-benefit analysis.
- identify the benefits and costs associated with a particular project or policy.
- apply alternative methods for valuing non-market goods and services.
- identify the problems of risk and uncertainty in the context of project evaluation.
- understand the choice of an appropriate social discount rate for cost-benefit analysis.
- apply cost-benefit analysis in the context of public 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?

By the end of this course the student 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
- Group work (project)
- Working in an international environment

### 3. COURSE CONTENT

Introduction. *Ex Ante* and *Ex Post* CBA. The basic steps of CBA. The basics of discounting. Net present value and internal rate of return. Mutually exclusive investment projects. Pareto efficiency. Kaldor-Hicks criterion. Social welfare functions. Changes in consumer and producer surplus. Market and government failures. Public goods. Valuing benefits and cost. Shadow prices. Conversion factors. Social discount rate. Risk and uncertainty. Sensitivity analysis. Expected utility. Income distribution. Non-market valuation of goods and services. Case studies-problem solving.

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

TEACHING METHOD	Face to face lectures		
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of IT in teaching, and in communicating with students (eclass).		
TEACHING ORGANIZATION	Activity Semester workload		
	Lectures, 3 hours per week	13X3 = 39 hours	
	Study at home	111 hours	
	Total number of hours for the 150 hours (total		
	Course (25 hours of work-load	student work-load)	
	per ECTS credit)		
STUDENT ASSESSMENT	The overall course grade is the sum of a) the final exam grade plus b) 20 percent of the optional written assignment grade.		

## 5. ATTACHED BIBLIOGRAPHY

- Recommended Literature:

Boardman, A.E., D.H. Greenberg, A.R. Vining, and D.L. Weimer. 2011. Cost-Benefit Analysis: Concepts and Practice (4th ed.). Saddle River, N.J.: Pearson Prentice Hall.

Campbell, Harry F. and Richard P.C. Brown. 2015. Cost-Benefit Analysis: Financial and Economic Appraisal using Spreadsheets (2nd ed.). New York: Routledge.

Lumby, S. and Jones, C. 2001. Fundamentals of Investment Appraisal. London: Thomson Learning.

## **APPLIED ECONOMETRICS**

## **COURSE OUTLINE**

SCHOOL	ECONOMICS & BUSINESS
DEPARTMENT	ECONOMICS

LEVEL OF COURSE	UNDERGRA	DUATE		
COURSE CODE	ECO_421	S	EMESTER OF STUDIES	8 <sup>th</sup>
COURSE TITLE	APPLIED EC	ONOMETR	ICS	
INDEPENDENT TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS	
		Lectures	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, Business Economics, Microeconomic Theory II, Econometrics			
TEACHING AND ASSESSMENT LANGUAGE:	Greek			
THE COURSE IS OFFERED TO ERASMUS STUDENTS	Yes (in English)			
COURSE WEBPAGE (URL)	https://www.econ.upatras.gr/en/course/applied-econometrics/ https://eclass.upatras.gr/courses/ECON1397/			

# **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 software such as Stata & R.

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 (cross-section data, timeseries data, and/or panel data), 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 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:

- Model specification, 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 and tests of heteroskedasticity and autocorrelation
- The use of dummy variables in economic analysis
- Endogeneity, instrumental variables and the two-stage Ordinary Least Squares estimation method
- Limited dependent variable models (probit, logit, tobit), interpretation and calculation of marginal effects
- 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

4. TEACHING AND LEARNING	HETHODS - ASSESSMENT				
TEACHING METHOD	Face to face lectures				
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	<ul> <li>Support Learning through the e-class platform</li> <li>Learning and using modern econometric software such as Stata &amp; R for practice on all the taught techniques and the presentation of economic results</li> </ul>				
TEACHING ORGANIZATION	Activity	Semester workload			
	Lectures (3 hours per week x 13 weeks)	39 hours			
	Hours for private study and preparation of home-works				
	Total number of hours for the Course (25 hours of work-load per ECTS credit)  150 hours (total student work-load)				
STUDENT ASSESSMENT	Written final exam in Greek Optional individual small-scale exerc material presented using the Stata & I				

## 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 EFTHYMIOS, 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				
	SCHOOL	ECONOMICS & BUSINESS			
	DEPARTMENT	ECONOMICS			
	LEVEL OF COURSE	UNDERGRA	DUATE		
	COURSE CODE	ECO_424	SEMES'	TER OF STUDIES 8	th
	COURSE TITLE	DATABASE SYSTEMS			
INDEPENDENT TEACHING ACTIVITIES		ITIES	TEACHING HOURS PER WEEK	ECTS CREDITS	
	Lectures and tutorials			2 (lect.) 2 (tut.)	6
	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	No			
Ŀ	COURSE WEBPAGE (URL)	http://www.econ.upatras.gr/en/undergraduate/courses/database-systems			

#### **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 successfully completing the course, students will be able to: Knowledge:

- Understand the role and importance of databases in data management issues and in real life applications
- Define the notion of database and Database Management System (DBMS)
- Describe the desired characteristics of data
- Describe conceptual data models and especially the EntityRelationship and Extended Entity-Relationship models
- Describe the Relational database model and the Relational Database Management Systems
- Describe the basic steps required to design databases
- Evaluate the design of databases
- Identify the concepts and operators that are supported by the SQL language for defining and manipulating data

#### Skills

- Design conceptual models based on the description of microcosms
- Design relational databases based on the conceptual design of microcosms
- Define the data using the SOL language
- Retrieve data using the SQL language
- Use the RBDMSs MS Access and MySQL to design and implement 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

TEACHING METHOD	Face-to-face		
USE OF INFORMATION AND	<ul> <li>Slides and notes to support lectures</li> </ul>		
COMMUNICATIONS	<ul> <li>Software for demonstration</li> </ul>	and practical application	
TECHNOLOGY	purposes to show statistical da	ta processing	
	examples, code snipp Perform weekly onling of the understanding of material Hand in homeworks	material (slides, notes, pets etc) ne quizzes to evaluate	
TEACHING ORGANIZATION	Activity	Semester workload	

	Lectures	26 hours
	Lab exercises	26 hours
	Team Project	64 hours
	Individual quizzes, assignments and Self-study	34 hours
	Total number of hours for the	150 hours (total
	Course (25 hours of work-load	student work-load)
	per ECTS credit)	
STUDENT ASSESSMENT	<ol> <li>One Team Project on designing and implementing a database using a RDBMS: 30%</li> <li>Final exam: 70%</li> </ol>	

# 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), <a href="https://dl.acm.org/pub.cfm?id=J777">https://dl.acm.org/pub.cfm?id=J777</a>

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

# **MATHEMATICAL ECONOMICS**

## **COURSE OUTLINE**

 GENTERU					
SCHOOL	ECONOMICS & I	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS				
LEVEL OF	UNDERGRADUA	ATE			
COURSE					
COURSE CODE	ECO_450	SEMES	TER OF STUDIES	8 <sup>th</sup>	
COURSE TITLE	MATHEMATICAL ECONOMICS				
INDEPENDENT TEACHING ACTIVITIES			TEACHING HOURS PER WEEK	ECTS CREDITS	
		Lectures	3	6	
COURSE TYPE	Field of Science (Economics)				
PREREQUISITE COURSES:	Suggested prerequisites: Microeconomics I & II, Mathematics for Economists I & II				

TEACHING AND	Greek
ASSESSMENT	
LANGUAGE:	
THE COURSE IS	NO NO
OFFERED TO	
ERASMUS	
STUDENTS	
COURSE	https://www.econ.upatras.gr/en/undergraduate/courses/mathematical-
WEBPAGE (URL)	economics

#### **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

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

#### 5. ATTACHED BIBLIOGRAPHY

- ,	Suga	ested	Liter	ature:
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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.)

Tsoulfidis L. (1999). Mathematics of Economic Analysis. 2nd Edition. G. Dardanos – K. Dardanos. Athens. (in Greek only) (Τσουλφίδης 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: <a href="https://mitpress.mit.edu/books/mathematics-economics">https://mitpress.mit.edu/books/mathematics-economics</a>

# **ECONOMICS OF ENTREPRENEURSHIP**

## **COURSE OUTLINE**

SCHOOL	ECONOMICS & BUSINESS ADMINISTRATION			
DEPARTMENT	ECONOMICS			
LEVEL OF COURSE	UNDERGRA	ADUATE		
COURSE CODE	ECO_471 SEMESTER OF 8 <sup>th</sup>			
	STUDIES			
COURSE TITLE	ECONOMICS OF ENTREPRENEURSHIP			
INDEPENDENT TEACHING ACTIVITIES  if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits			TEACHING HOURS PER WEEK	ECTS CREDITS

	Lectures	3	6
Add rows if necessary. The organise	ation of teaching and the		
teaching methods used are describ	ed in detail at (d).		
COURSE TYPE	Field of Science		
general background,			
special background, specialised			
general knowledge, skills			
development			
PREREQUISITE	Suggested prerequisites:	Microeconomics	I&II, Mathematics for
COURSES:	Economists II		
TEACHING AND	Greek		
ASSESSMENT			
LANGUAGE:			
THE COURSE IS	No		
OFFERED TO ERASMUS			
STUDENTS			
COURSE WEBPAGE			
(URL)			

#### **Learning outcomes**

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

Consult Appendix A

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

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

- Definition of entrepreneurship, obligations of the company in this context, analysis of social needs and trends, exploration of business opportunities, development of business ideas, methods of creative thinking, intangible industrial property, participation and management.
- The basic concepts and theories of the operation and actions of entrepreneurship (Marshall, Knight, Schumpeter, Shackle, Leibenstein, Kirzner, Casson) and a parallel examination of the historical development of entrepreneurship.
- Determinants of entrepreneurship, business motivations and behavior (Scitovsky, Bronfebrenner, Kaiser models) with particular emphasis on human capital. Examining further issues such as creative imitation (Drucker) and the production and dissemination of innovations (Machlup, Arrow, Dosi). Quantitative methods used in contemporary entrepreneurship research (i.e regression, experimental and quasi-experimental methods, hazard models).
- Financing entrepreneurship through different models (Evans and Jovanovic, Aghion and Bolton, Newman). The development of the business process itself (conception and evaluation of the business idea, development of the business model, creation of a business plan, selection of a sustainable development model and investigation of exit strategies).
- Impact study and development of appropriate policies.

## **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 pressant technology

Project planning and management Respect for difference and multiculturalism Respect for the natural environment

information, with the use of the necessary technology Adapting to new situations

Showing social, professional and ethical responsibility and

Decision-making
Working independently

sensitivity to gender issues Criticism and self-criticism

Team work
Working in an international environment

Production of free, creative and inductive thinking

Working in an interdisciplinary environment Production of new research ideas

Others...

Team work

- Planning and management of works
- Respect to the natural (and built) environment

• Promotion of free, creative and inductive thinking

#### 3. COURSE CONTENT

Entrepreneurship main models of modern theory based on Lucas's model, its different versions, but also the critique that was developed and the extensions at the micro and macro level. Different theories in the present context (Marshall, Knight, Schumpeter, Shackle, Leibenstein, Kirzner, Casson). Determinants of entrepreneurship with reference to the theoretical background. Emphasis is placed on the theory of human capital, macroeconomic factors as well as business characteristics. The ways of financing are presented by presenting topics such as business plan funds and the relationship between wealth and entrepreneurship is analyzed (models Evans and Jovanovic, Aghion and Bolton, Newman). Study additional thematic areas related to the impact on job creation, the diffusion of innovation and growth. Finally, the development of policies to strengthen entrepreneurship is examined.

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

# TEACHING METHOD

Face-to-face, Distance learning, etc.

Face to face

# USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY

Use of ICT in teaching, laboratory education, communication with students

- Use of PowerPoint during lectures
- Lecturing notes are uploaded in e-class in the form of pdf files, which the enrolled students can freely download
- Bibliographical material (scientific articles and book chapters) in pdf files, is regularly uploaded in e-class, which the enrolled students can freely download
- Various information and announcements concerning the course are regularly uploaded in e-class
- Distant communication with students (when needed) takes place via e-mail

#### TEACHING ORGANIZATION

The manner and methods of teaching are described in detail.

Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.

The student's study hours for each learning activity are given as well as the hours of nondirected study according to the principles of the ECTS

Activity	Semester workload
Lectures (3 hours/week x 13	39 hours
weeks)	
Independent study (including the	111 hours
study necessary for the	
assignments)	
Total number of hours for the	150 hours (total
Course (25 hours of work-load	student work-load)
per ECTS credit)	

## STUDENT ASSESSMENT

Description of the evaluation procedure

Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other

Specifically-defined evaluation criteria are given, and if and where they are accessible to students.

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.

[\* 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].

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 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.

## 5. ATTACHED BIBLIOGRAPHY

### -Suggested Literature

Parker, S. C. (2018). *The economics of entrepreneurship*. Cambridge University Press. Oxford Handbook of Entrepreneurs hip, OUP 2008.

Η Δημιουργία Νεοφυών Επιχειρήσεων: Επιχειρηματικότητα για τον 21ο Αιώνα, Stephen Spinelli, Robert Adams, Vasilis M. Papadakis, Utopia, 2015

### PORTFOLIO MANAGEMENT

### **COURSE OUTLINE**

#### 1. GENERAL

SCHOOL	ECONOMICS & BUSINESS				
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRA	DUATE			
COURSE CODE	ECO_472	SEMES	TER OF STUDIES 8	3 <sup>th</sup>	
COURSE TITLE	PORTFOLIO MANAGEMENT				
INDEPENDENT TEACHING ACTIVITIES			TEACHING HOURS PER WEEK	ECTS CREDITS	
Lectures and tutorials			3 (lect.) 1 (tut.)	6	
_					
COURSE TYPE Field of Science					
PREREQUISITE	Suggested P	rerequisite	: Financial Economics	S	
COURSES:	COURSES:				
TEACHING AND	Greek				
ASSESSMENT					
LANGUAGE:					
THE COURSE IS	No				
OFFERED TO					
ERASMUS STUDENTS					
COURSE WEBPAGE	http://www	<u>.econ.upat</u>	<u>ras.gr/en/undergrad</u>	uate/courses/portofolio-	
(URL)	<u>management</u>				

# 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 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.

The students will also have the ability to analyze topics such as:

- Estimation of returns, and systematic and non-systematic risk of a portfolio.
- Identification of effective portfolios.
- Evaluation of investors' risk/return preferences and formulation of excellent portfolios based on utility theory.
- Applying portfolio valuation measures in order to assess portfolio management and performance.
- Development of diversification strategies in order to reduce the non-systematic risk and hedge the risk of buying a portfolio.
- Forming portfolio management strategy

# **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 which are related to Portfolio Management.
- 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

. TEACHING AND LEARNING METHODS - ASSESSMENT					
TEACHING METHOD	Face to face lectures and tutorials				
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of IT in teaching and communication with students (eclass).				
TEACHING ORGANIZATION	Activity	Semester workload			
	Lectures, 3 hours per week	13X3 = 39 hours			
	Tutorials, 1 hour per week 13X1 = 13 hours				
	Individual study 98 hours				
	Total number of hours for the Course (25 hours of work-load per ECTS credit)  150 hours (total student work-load)				
STUDENT ASSESSMENT					

## 5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

Saunders Anthony, Cornett Marcia M., Financial Markets and Institutions, 7th edition, 2018, McGraw Hill, ISBN 1259919714

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 Analysis

## **MONEY AND BANKING**

### **COURSE OUTLINE**

#### 1. GENERAL

1. ULNERVAL					
SCHOOL	ECONOMICS	ECONOMICS & BUSINESS			
DEPARTMENT	ECONOMICS				
LEVEL OF COURSE	UNDERGRA	UNDERGRADUATE			
COURSE CODE	ECO_482	S	EMESTER OF	8 <sup>th</sup>	
		STUDIES			
COURSE TITLE	MONEY ANI	MONEY AND BANKING			
INDEPENDENT TEACHING ACTIVITIES			TEACHING HOURS PER WEEK	ECTS CREDITS	
Lectures and 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)	https://www.econ.upatras.gr/course/chrima-kai-trapeziki/				
	https://eclass.upatras.gr/courses/ECON1385/				

# 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 functions of money and the financial system, the determining factors of the demand and supply of money, the determinant of long term interest rates and simple bond price valuation models
- understand the behavior of commercial banks and their role in shaping monetary quantities
- understand the role of the Central Bank and the means/ways of exercising conventional and unconventional monetary policy to stabilize the economy

- 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 and Banking.
- **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

- 1. Introduction to money, banking and financial markets
- 3. The concept, behaviour, structure and the term premium of interest rates
- 4. Foreign exchange market
- 5. Financial system
- 6. Banking and management of financial institutions
- 7. Financial regulation
- 8. Banking sector and financial crises
- 9. Central Banks
- 10. Money supply
- 11. Monetary policy tools and the conduct of monetary policy
- 12. International financial system and monetary policy
- 13. Monetarist theory: quantity theory, demand for money, monetary policy curves, monetary policy theory, the role of expectations, monetary policy transmission mechanisms
- 14. Modern Monetary Policy and challenges

## 4. TEACHING AND LEARNING METHODS - ASSESSMENT

Face to face lectures & tutorials

USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY				
TEACHING ORGANIZATION	Activity	Semester workload		
	Lectures, 3 hours per week	13X3 = 39 hours		
	Tutorials, 1 hour per week 13X1 = 13 ho			
	Work at home 98 hours			
	Total number of hours for the	150 hours (total		
	Course (25 hours of work-load   student work-load			
	per ECTS credit)			
STUDENT ASSESSMENT	Final written exam			
	Mid-term exam (optional) and project-presentation (optional)			

## 5. ATTACHED BIBLIOGRAPHY

## - Suggested bibliography:

F.Mishkin The Economics of Money, Banking & Financial Markets,  $13^{th}$  edition, Pearson (2021) ISBN 1292409487

Carlin, W and D Soskice (2014) Macroeconomics: Institutions, Instability, And The Financial System, OUP

K Matthews and J Thompson (2014) The Economics of Banking, Wiley

McLeay et at. (2014) Money Creation in the Modern Economy. Quarterly Bulletin Q1, BoE.

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:

Journal of International Money and Finance

International Review of Finance,

Journal of International Financial Institutions & Money,

Journal of Money, Credit & Banking,

Journal of Banking and Finance,

Journal of Monetary Economics,

International Journal of Central Banking,

Journal of financial stability,

Journal of financial intermediation

Journal of Empirical Finance

# **CLIMATE CHANGE ECONOMICS**

## **COURSE OUTLINE**

SCHOOL	ECONOMICS & BUSINESS ADMINISTRATION
DEPARTMENT	ECONOMICS

LEVEL OF COURSE	UNDERGRADUATE				
COURSE CODE	ECO_494	SEMESTER OF		8 <sup>th</sup>	
			STUDIES		
COURSE TITLE	CLIMATE CHANGE ECONOMICS				
INDEPENDENT TEACH	ING ACTIV	ITIES			
if credits are awarded for separate components of the course,			TEACHING		
e.g. lectures, laboratory exercise	, ,		HOURS	ECTS CREDITS	
awarded for the whole of the d		weekly	PER WEEK		
teaching hours and th	Lectures an	d tutorials	3 (lect.)	6	
	Lectures an	u tutoriais	3 (tut.)	0	
Add rows if necessary. The organism	Add rows if necessary. The organisation of teaching and the				
teaching methods used are describ					
COURSE TYPE	Field of Science				
general background,					
special background, specialised general knowledge, skills					
general knowledge, skills development					
PREREQUISITE	Introduction to Economics				
COURSES:					
TEACHING AND	Greek				
ASSESSMENT					
LANGUAGE:					
THE COURSE IS	No				
OFFERED TO ERASMUS					
STUDENTS	1 // 1		T T T T T T T T T T T T T T T T T T T	4407	
COURSE WEBPAGE	https://eclass.upatras.gr/courses/ECON1443/				
(URL)					

## 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.

On completion of this course, the student will be able to:

- Understand the likely implications of climate change on economies and societies.
- Comprehend core concepts and debates in climate change economics
- Apply different assumptions, parameters and variables to a range of economic problems and observe, interpret and debate the outcomes
- Understand key concepts from economics that are used in climate change and carbon management policy making.
- Recognise and assess the economic dimensions of various climate change and carbon management policy challenges.
- Evaluate the key assumptions underpinning climate change economics as used in carbon management.
- Communicate and explain the critical economic issues associated with climate change and carbon management with non-economist stakeholders of the primary polluting industries.

### **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?

• Respect for natural processes and the	
environment	
<ul> <li>Awareness of global environmental</li> </ul>	
issues	
Promotion of free, creative and inductive	
thinking	
•	

### 3. COURSE CONTENT

Climate change – The science of climate change and fundamental climate change forecast models. Radiative forcing, global mean temperature, climate sensitivity. Greenhouse gases and the carbon cycle. Feedbacks, amplifiers and stabilizers. Tipping points, permafrost, Greenland and Antarctic ice sheets. Extreme weather. Uncertainties and projections.

Climate change impacts on ecosystems and humans, climate change mitigation, adaptation and adaptive capacity, and climate change vulnerability. The peculiarities of regional climate change.

The important economic problems of climate change. The tragedy of the commons (property rights) and externalities (atmospheric pollutants and greenhouse gases). The ethical justification of intertemporal decisions and the discount rate. Climate change and social welfare: equity and fairness, social welfare functions, approaches to measure welfare.

The microeconomics of climate change. The Stern Review. Kyoto Protocol, Paris and other International aggreements..Nordhau's DICE model and other integrated models – basic assumptions and results, limitations and critique. Basic economic instruments: Carbon tax and cap and trade.

Public response to climate change and climate change policy. Abatement costs and the interactions between climate change, climate policy and technology policies. Cost-benefit analysis. Comparison with regulation. The Shadow Cost of Carbon. Coping with uncertainty. Types of uncertainty, the economics of catastrophes, fat tails and the Dismal Theorem.

The macroeconomic impacts of climate change. Aggregation and aggregate effects on GDP, employment and consumption. Tracking climate finance. Greenhouse gas reporting obligations. Major polluting industries.

Business and climate change. Climate-neutral and net-zero business models. Business strategies for climate change. Reporting obligations and disclosure.

Climate change and the limits to growth. Alternative models of growth and development. Technology, production and consumption. Geoengineering, carbon capture and sequestration. Green fiscal policy: from austerity to full employment in a low carbon economy.

# 4. TEACHING AND LEARNING METHODS - ASSESSMENT

#### TEACHING METHOD Face to face Face-to-face, Distance learning, etc. USE OF INFORMATION AND • Use of PowerPoint during lectures **COMMUNICATIONS** • Lecturing notes are uploaded in e-class in the form of pdf TECHNOLOGY files, which the enrolled students can freely download Use of ICT in teaching, laboratory education, • Bibliographical material (scientific articles and book communication with students chapters) in pdf files, is regularly uploaded in e-class, which the enrolled students can freely download • Various information and announcements concerning the course are regularly uploaded in e-class • Distant communication with students (when needed) takes place via e-mail TEACHING ORGANIZATION Activity Semester workload The manner and methods of teaching are Lectures (3 hours/week x 13 39 hours described in detail. Lectures, seminars, laboratory practice, Tutorials (3 hour/week x 13 39 hours fieldwork, study and analysis of bibliography, weeks) tutorials, placements, clinical practice, art Independent study (including the workshop, interactive teaching, educational 72 hours visits, project, essay writing, artistic creativity, study necessary for the assignments) The student's study hours for each learning activity are given as well as the hours of nondirected study according to the principles of Total number of hours for the 150 hours (total Course (25 hours of work-load student work-load) per ECTS credit) STUDENT ASSESSMENT Description of the evaluation procedure The students' assessment is based upon written exams at the end of the semester and, when possible, on class participation. Language of evaluation, methods of evaluation, summative or conclusive, multiple questionnaires, short-answer questions, open-ended questions, problem

olving, written work, essay/report, oral samination, public presentation, laboratory ork, clinical examination of patient, art terpretation, other
pecifically-defined evaluation criteria are ven, and if and where they are accessible to budents.

# 5. ATTACHED BIBLIOGRAPHY

# -Suggested Literature

## The Stern Review

IPCC - Assessment Report 6 (AR6) various parts.

Economides, G., Papandreou, A., Sartzetakis, E. and Xepapadeas, A. 2018. <u>The Economics of Climate Change</u>. Bank of Greece.

Επιτροπή Μελέτης Επιπτώσεων Κλιματικής Αλλαγής. 2011. <u>Οι Περιβαλλοντικές, Οικονομικές και Κοινωνικές Επιπτώσεις της Κλιματικής Αλλαγής Στην Ελλάδα</u>. Τράπεζα της Ελλάδος.

Tol, R. 2019. Climate Economics: Economic Analysis of Climate, Climate Change and Climate Policy. Edward Elgar Publishing; 2nd edition.

Fitzroy R., Papyrakis, E., 2016. An Introduction to climate change economics and policy. Routledge publication;  $2^{nd}$  Edition

Your microeconomics, environmental and natural resource economics and energy economics textbooks.

## SPECIAL TOPICS ON ECONOMICS OF STRATEGY

### **COURSE OUTLINE**

1. GENEKAL				
SCHOOL	ECONOMICS & BUSINESS ADMINISTRATION			
DEPARTMENT	ECONOMICS			
LEVEL OF COURSE	UNDERGRADUATE			
COURSE CODE	ECO_474 SEMESTER OF 8th			8 <sup>th</sup>
			STUDIES	
COURSE TITLE	SPECIAL TOPICS ON ECONOMICS OF STRATEGY			TRATEGY
INDEPENDENT TEACHING ACTIVITIES  if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly			TEACHING HOURS PER WEEK	ECTS CREDITS
teaching hours and th	aching hours and the total credits			
Lectures			3	6
Add rows if necessary. The organisation of teaching and				
	methods used are described in detail at (d).			
COURSE TYPE	Field of Science			
general background, special background, specialised				
general knowledge, skills				
development				
PREREQUISITE COURSES:	Introduction to Microeconomics, Microeconomic Theory II,			
	Business Economics, Econometrics			
TEACHING AND	Greek with the use of English terminology			
ASSESSMENT LANGUAGE:	3 1 1 3 3			
THE COURSE IS OFFERED	No			
TO ERASMUS STUDENTS				
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/courses/ECON1524/			
(0.5.5)				

#### 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 completion of this course, students will be able to:

- Gain a solid understanding of fundamental economic principles as they apply to business decision making, including supply and demand analysis, cost structures, and market structures.
- Analyse the economic dimensions of sustainable development and its objectives by exploring concepts such as resource efficiency and the economic impacts of sustainable practices.
- Formulate effective business strategies based on empirical results and literature that are aligned with the objectives of sustainable development, integrating economic considerations, environmental management and social responsibility.
- Understand the ways of integrating the dimensions of Corporate Social Responsibility (CSR) in the formulation of green business decisions
- Apply appropriate econometric techniques for business analysis and interpret the outcome through analysis of business and economic data, enabling them to make informed decisions and forecasts
- Explore strategies of the twin business transition to carbon neutrality by delving into the unique challenges faced by Small and Medium Enterprises (SMEs) in navigating the twin transitions (green transition and digital transformation) to achieve it developing knowledge on strategies and policies that can facilitate SMEs in aligning their operations with carbon neutrality targets.
- Understand the content and impact of European policies and their effects on businesses, industries and sectors, gaining knowledge of the European policy framework, understanding their impact on business strategy formulation
- Assess how economic policies influence strategic planning and sustainability initiatives.

## **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 data and information
- Decision making
- Respect for natural processes and the environment
- Awareness of global environmental issues

Promoting free, creative and deductive thinking

•

## 3. COURSE CONTENT

The module focuses on how to formulate business strategy in the light of the transition to sustainability. Introduction to the economics of sustainable development, policy evolution, measurement, critique, policy framework, study and interpretation of empirical evidence. Introduction to business economics and sustainability. Concepts of business strategy, strategic planning and orientation combined with resource-capability theories and approaches at the firm level. The role of technological change, diversification and competitive advantage of firms for sustainable transition is studied. Business strategy and planning in promoting sustainability. Introduction to the application of econometrics in the analysis of sustainability-related data for sustainable business decision making and study of the factors of strategy adoption using limited dependent variable models and the case of unobservable variables. International experience is reviewed, applications are presented to interpret results and derive policies based on empirical data. European policy and sustainable development. The European Green Deal as a growth strategy towards achieving carbon neutrality. Exploring the impact of European policies on sustainable development and understanding the key European policies shaping sustainable development and their impact on business. The technological aspects of green growth and the twin transitions for SMEs. Exploring strategies for SMEs to achieve carbon neutrality in the context of the twin transition. Challenges and opportunities for SMEs in adopting green technologies and navigating the twin transition to carbon neutrality. Fiscal policy implications for the green transition at country and firm level. Environmental Social Governance performance and Sustainability. Investing in the potential to create green technological advantage and technological dependence. Green technologies and environmental innovation. Efficiency and productivity analysis through green production functions and sustainable technological structures. Empirical evidence, measurement and interpretation. Review of international experience and case studies.

# 4. TEACHING AND LEARNING METHODS - ASSESSMENT

TEACHING METHOD Face-to-face, Distance learning, etc.	Face to face		
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY  Use of ICT in teaching, laboratory education, communication with students	<ul> <li>Use of PowerPoint during lectures</li> <li>Posting of educational material on the asynchronous e-learning platform in the course area</li> <li>Provision of bibliographic references for study on the asynchronous tele-education platform at the course site</li> <li>Posting of information of interest and announcements related to the course on the asynchronous e-learning platform in the classroom</li> <li>-Communication via e-mail/eclass</li> </ul>		
TEACHING ORGANIZATION	Activity	Semester workload	
The manner and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.  The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS	Lectures (3 hours/week x 13 weeks) Independent study Total number of hours for the Course (25 hours of workload per ECTS credit)	39 hours  111 hours  137hours (total student work-load)	
STUDENT ASSESSEMNT  Description of the evaluation procedure  Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, shortanswer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other  Specifically-defined evaluation criteria are given, and if and where they are accessible to students.	conducted in person. Student assessment is based on a written final examination which may include multiple choice questions, short answer questions, solving exercises, interpretation of results and/or a combination of the above.		

## 6. ATTACHED BIBLIOGRAPHY

Suggested bibliography:

- Principles of environmental economics and sustainability, Kritiki SA Publications, ISBN: 9789605864439, Book Code in Eudoxos: 122075417.
- Perloff, J. M. "Managerial Economics and Strategy (3rd Edition), The Pearson Series in Economics.
- Recommended published papers relevant to the content of each topic.
- The textbooks Microeconomics, Business Economics, Economics of Industrial Organization, Economics of the Environment and Natural Resources, Energy

Economics, Econometrics and Applied Econometrics can be additional reference points.

## **PLACEMENT**

## **COURSE OUTLINE**

### 1. GENERAL

ΣΧΟΛΗ	Economics	Economics & Business			
DEPARTMENT	Economics				
LEVEL OF COURSE	Undergraduate				
COURSE CODE	ECO 499		SEMESTER OF STUDIES	8	
COURSE TITLE	Internship (Optional elective course)				
INDEPENDENT TEACI	INDEPENDENT TEACHING ACTIVITIES				ECTS CREDITS
Interns	ship				3
COURSE TYPE	Skill Development				
PREREQUISITE COURSES:	No				
TEACHING AND ASSESSMENT LANGUAGE:	GREEK				
THE COURSE IS OFFERED TO ERASMUS STUDENTS	No				
COURSE WEBPAGE (URL)	http://www.econ.upatras.gr/el/undergraduate/Internship				

## 2. LEARNING OUTCOMES

## **Learning outcomes**

- Familiarization of students with the application of economic science, in workplaces in real conditions as they include all relevant parameters (scientific, technical, financial, legal, social, security, etc.)
- Acquisition of professional experience/previous experience, as required and described by companies, organizations and the modern labor market, facilitating the entry of students into the labor market with better conditions.
- Strengthening the CV of the students with the successful completion of the P.A
- Development of professional awareness and highlighting of skills that will help in future specialization and selection of the most appropriate and efficient field of employment.
- Smoother transition into the professional arena, with an emphasis on planning, collaboration, productivity, efficiency, , accepting responsibility and evaluating work.
- Connecting the real (in the sense of non-academic) economy with the academic field and creating an environment of two-way communication, information, understanding and substantial cooperation between the Department and the hosting bodies of the P.A.

## **General Competences**

After successful completion of the Internship, students must have acquired the following general skills:

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

- Teamwork
- Work in an interdisciplinary environment
- Respect for diversity and multiculturalism
- Demonstration of social, professional and ethical responsibility and sensitivity in matters of professional conduct
- Promotion of free, creative and inductive thinking
- Exercise criticism and self-criticism

### 3. COURSE CONTENT

- 1. The department's Internship takes place in the spring semester of each academic year, has a mandatory duration of (3) three consecutive months within the 8th semester of studies and ends at the latest on September 30 of each year.
- 2. The PA is carried out in employment agencies of the private or public sector and concerns activities related to the knowledge and skills of the Economist (mandatory they undertake financial/administrative tasks)
- 3. Businesses/organizers must be located in Greece, although priority is given to looking for employment agencies in the wider area of Patras as the program does not subsidize rent or other living expenses. If the student wishes then he/she can be placed in any region of Greece.
- 4. Students can choose/propose employment agencies or have agency(ies) recommended to them by the scientific supervisor of the internship. They can also choose agencies through the central internship management service (https://atlas.grnet.gr) or the advertisements posted at the University of Patras Internship Office (https://praktiki.upatras.gr/news-blog/aggelis/)
- 5. The following program outlines the process of the students' internship over a period of three (3) months:
  - a. in the 1st week, the student interns get to know the employment agency and the departments with the aim of familiarizing them with the work culture at the agency
  - b. after the 1st month, the students specialize and know better their tasks and the responsibilities assigned to them
  - c. in the 2nd and 3rd months, the most specialized employment of the students is proposed in the department of the employment agency where they have been placed

### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

TEACHING METHOD	Face-to-face	
USE OF INFORMATION AND		
COMMUNICATIONS		
TECHNOLOGY		
TEACHING ORGANIZATION	Activity	Semester workload
	Internship (placement)	75
	Course total	75

### STUDENT ASSESSEMNT

- At the link https://praktiki.upatras.gr/odigiesoloklirosis-kai-pliromis-praktikis-askisis-pp/ there are detailed supporting documents/documents that students must submit upon completion of the P.A.
- Only if the PA is interrupted by the intern student or the employment agency, the PA is not completed and is not recorded in the Diploma supplement and in the detailed score
- The supervising faculty member (as determined in the Department Assembly prior to the invitation to participate in the P.A.) files with the completion of the P.A. the student's "Trainee Evaluation Form by the Supervising P.A. Professor" (found in the above link). The grade of the intern student in the Report is "Pass" and in the diploma appendix as well as in the analytical grade a "PASS" grade is recorded (the Internship course is not counted in the ECTS for obtaining a degree nor in the grade of the degree of students as it is an "Elective Course by choice")

## 5. ATTACHED BIBLIOGRAPHY

