

SYLLABUS

1. GENERAL

College	College of Applied Economic and Social Sciences		
Department	Regional and Economic Development		
Level of Studies	Undergraduate		
Couse Code	POA3526	SEMESTER OF STUDY	5o
Course Title	Natural Resource Economics		
Faculty Name	GEORGE EKONOMOU		
Office Hours	Monday – Thursday 13.00 – 14.00		
email	oikonomoug@aua.gr		
INDEPENDENT TEACHING ACTIVITIES where credit is awarded for discrete parts of the course e.g. lectures, laboratory exercises, etc. If credit is awarded for the whole course, indicate the weekly teaching hours and the total number of credits		WEEKLY CONTACT HOURS	ECTS
		5	5
COURSE TYPE Background, General Knowledge, Scientific Area, Skills Development	Scientific Domain		
Prerequisites	-		
Language of instruction and examinations	Greek		
Course Offered to Erasmus Students	NO		
Course Webpage	https://oeclass.aua.gr/eclass/		

2. COURSE LEARNING OUTCOMES

Learning Outcomes

•The learning outcomes of the course describe the specific knowledge, skills and competences of an appropriate level that students will acquire after successful completion of the course.

- Knowledge
 - Define and express the basic concepts of Natural Resource Economics
 - Determine the functions of the natural environment related to the development of economic activities
 - Perceive indicators and variables used in the Natural Resource Economics
- Abilities
 - Analyze the relationship between economic development and environmental quality through econometric approaches
 - Formulate judgments and propose solutions to tackle market failure phenomena
 - Interpret environmental policy measures (direct regulations, economic measures, and environmental taxes)
 - Analyze issues related to Well-being, economics, and the Environment
- Δεξιότητες
 - Evaluate and countercheck arguments to tackle environmental issues derived from the economic activity deployed in natural resource exploitation

Generic Skills

Taking into account the general competences that the graduate should have acquired (as listed in the Diploma Supplement and listed below), which one(s) does the course aim at?

Search, analysis and synthesis of data and information, including the use of the necessary technologies
Adaptation to new situations
Decision-making
Autonomous work
Group work
Working in an international environment
Working in an interdisciplinary environment
Generating new research ideas

Project planning and management
Respect for diversity and multiculturalism
Respect for the natural environment
Demonstrating social, professional and ethical responsibility and gender sensitivity
Exercise of criticism and self-criticism
Promotion of free, creative and deductive thinking

Decision making

Teamwork

Work in a multinational environment

3. COURSE CONTENT

- Theoretical foundation of natural resource economics. Environmental thinking in economics. Environmental growth and income inequalities. Rate of economic growth and impacts on income levels. Well-being and the environment. Economic approach. Private and public goods. Other types of goods. Basic economic problems. Analysis of production possibility frontier. Market failure. The role of Government. Causes of market failure. Imperfect information. Monopoly. Public goods. Externalities or external economies. Extensive analysis of the perfect level of pollution. Pareto level of pollution. Ineffectiveness fixes. Pareto effective provision of a public good. Environmental policy measures. Renewable sources of energy. Energy issues from conservative fuel use. Climate change. Impacts on the economy and the quality of natural resources. Time-based evolution of the international goals for sustainability.

4. TEACHING AND LEARNING METHODS – EVALUATION

METHOD OF DELIVERY Face-to-face, Distance learning, etc.	Lectures and meetings with students	
USE OF TECHNOLOGY, INFORMATION AND COMMUNICATION Use of ICT in teaching, laboratory training, communication with students	Use of interactive tables in teaching. The communication with the students will take place in the face-to-face level, also with emails and the use of direct electronic communication (e.g., skype)	
ORGANISATION OF TEACHING The way and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Study & Analysis of Literature, Tutorials, Practical (Placement), Clinical Exercise, Artistic Workshop, Interactive teaching, Educational visits, Study visits, Project work, Writing of work / assignments, Artistic creation, etc. The student's study hours for each learning activity as well as the hours of unguided study are indicated so that the total workload at semester level corresponds to the ECTS standards.	Activity	Semester Work Load
	Course delivery	65 hours
	Study of taught material	27 hours
	Exercises and practice in the field of natural resource economics	33 hours
	Course Total	125
STUDENT ASSESSMENT Description of the evaluation process Language of Assessment, Assessment Methods, Formative or Inferential, Multiple-Choice Test, Short Answer Questions, Test Development Questions, Problem Solving, Written Work, Report, Oral Examination, Oral Examination, Public Presentation, Laboratory Work, Clinical Examination of a Patient, Artistic Interpretation, Other Explicitly identified assessment criteria are stated and if and where they are accessible to students.	Written Final Exam at the end of the Semester	
	Exam	
	Written Final Exam	100% of the Grade in the Final Exams

5. RECOMMENDED BIBLIOGRAPHY

-Main Textbooks:

- Χάλκος Γεώργιος. Οικονομική Φυσικών Πόρων και Περιβάλλοντος (2η Έκδοση). Εκδόσεις Δίσιγμα. 2021 (Title in the Greek language).
- Menegaki, A.N. (2021). A guide to econometrics for the energy-growth nexus, Book in Elsevier, [<https://www.elsevier.com/books/a-guide-to-econometric-methods-for-the-energy-growth-nexus/menegaki/978-0-12-819039-5>]
- Melgar-Melgar, R.E, and Hall, C.A.S. (2020). Why ecological economics needs to return to its roots: The biophysical foundation of socio-economic systems. Ecological Economics, 169, 106567. <https://doi.org/10.1016/j.ecolecon.2019.106567>
- Menegaki, A.N, and Tugcu, C.T. (2018). Two versions of the Index of Sustainable Economic Welfare (ISEW) in the energy-growth nexus for selected Asian countries. Sustainable Consumption and Production, 14, 22-35. <https://doi.org/10.1016/j.spc.2017.12.005>

- Menegaki, A.N, and Tugcu, C.T. (2017). Energy consumption and Sustainable Economic Welfare in G7 countries; A comparison with the conventional nexus. Renewable and Sustainable Energy Review 69, 892-901. DOI: 10.1016/j.rser.2016.11.133
- Halkos, G, and Petrou, N.K. (2020). The relationship between MSW and education: WKC evidence from 25 OECD countries. Waste Management, 114(1), 240-252. <https://doi.org/10.1016/j.wasman.2020.06.044>
- Halkos, G, and Tsilika, K. (2020). Understanding transboundary air pollution network: Emissions, depositions and spatio-temporal distribution of pollution in European region. Resources, Conservation and Recycling, 145, 113-123.