



# **COURSE OUTLINE**

### (1) GENERAL

SCHOOL	School of Technology			
ACADEMIC UNIT	Department of Environmental Sciences			
LEVEL OF STUDIES	Undergraduate			
COURSE CODE	AY401		SEMESTER	4th
COURSE TITLE	ENVIRONMENTAL ECONOMICS II			
INDEPENDENT TEACHING ACTIV	VITIES WE		LY TEACHING HOURS	CREDITS
Теа	ching Hours		4	5
COURSE TYPE	General background			
PREREQUISITE COURSES	None			
LANGUAGE OF INSTRUCTION and EXAMINATIONS	Greek			
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No			
COURSE WEBSITE (URL)	https://eclass.uth.gr/courses/ENV U 133/			

### (2) LEARNING OUTCOMES

#### Learning outcomes

The objectives of the course are:

- To enhance students' understanding of the deep and reciprocal relationship between the economy and the natural environment in space, highlighting that the greatest challenge for the well-being of citizens is to maintain a good relationship between the natural environment and the economy. The course will explore the causes of environmental degradation and public strategies aiming at effective management and protection of the environment which is the cornerstone for sustainable spatial development, and
- To offer students the opportunity to acquire the necessary knowledge (methods and techniques) and to apply the analytical tools and models of economic theory to environmental problems.

The course aims at:

- Fostering students' knowledge and understanding of environmental and natural resources' economics concepts and methods.
- Developing students' ability to assess the environmental impact of production and consumption through an applied methodological framework of analysis, to be used to solve real environmental problems.
- Assisting students in acquiring skills for critical analysis, evaluation and synthesis of complex and multidimensional concepts.
- Contributing to the advancement of knowledge within the broader societal context.

Students will acquire skills that will offer them a broad overview, from an economic point of view, of contemporary environmental issues (such as the degradation of the quality of the environment, the depletion of the ozone layer, climate change, acid rain, the energy crisis, the food crisis, the proper management of the coastal area, fisheries, etc.) but also of issues arising from the overexploitation of natural resources.

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

- Understand the relationship between economy and the environment, by defining and explaining various important concepts and terminologies related to the environment.
- Thoroughly comprehend the theoretical foundation of the environmental and natural resources economics.
- Analyze known environmental problems, at an international level, focusing on the methods of solving them.

#### General Competences

• 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
- Respect for the natural environment
- Criticism and self-criticism
- Production of free, creative and inductive thinking

## (3) SYLLABUS

- Introductory concepts and terminologies of the environmental and natural resources economics Interdependence of Economy and Environment.
- Environmental thinking in Economics.
- Welfare Economics and the Environment: Differentiation of goods Production possibilities frontier Partial and General Equilibrium.
- Theory of externalities, property rights and the environment.
- Environmental policy measures: Direct regulations Financial means.
- Economic evaluation of the environment: Concepts and methods.
- Optimal management of natural resources: Theory of exhaustible natural resources Theory of renewable natural resources Transition from exhaustible to renewable natural resources.
- Analysis of environmental problems: (a) Energy, acid rain, (b) the greenhouse effect and the ozone layer, (c) biodiversity, desertification and (d) liquid and solid waste, marine pollution.

## (4) TEACHING and LEARNING METHODS – EVALUATION

DELIVERY	Face-to-face			
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	<ul> <li>Use of PowerPoint slides</li> <li>Communication with students via e-mail</li> <li>Use of asynchronous distance learning (e-class)</li> </ul>			
TEACHING METHODS	Activity	Semester workload		
	Lectures	25		
	Problems solving	30		
	Study and analysis of bibliography	45		
	Essay writing and presentation	25		
	Course total	125		
	(25 hours workload per credit)	125		
STUDENT PERFORMANCE	Students' performance is evaluated in the Greek language. The final			
EVALUATION	grade is determined by:			
	• A written exam (at the end of the semester) that contributes			
	70% to the final grade, applying one or more of the following			
	evaluation methods: Multiple-choice questions, short-answer			
	questions, problem-solving.			
	• The elaboration of an individual assignment (essay), in the 2nd			
	half of the semester, contributing 30% to the final grade.			
	Final Grade = 70% Exam Grade + 30% Assignment Grade			

### (5) ATTACHED BIBLIOGRAPHY

- Bithas, K. (2004). *Economic Perspective of the Environmental Protection*, TYPOTHITO Giorgos Dardanos Publications. (in Greek)
- Chalkos, E. G., (2021) *Natural Resources and Environmental Economics*, 2<sup>nd</sup> Edition/2021. Thessaloniki: Disigma Publications, ISBN: 9786182020579 (in Greek)
- Vlachou, A., (2001). *Environment and Natural Resources, Volume A'*. Athens: KRITIKI Publishing S.A. (in Greek)