



# **COURSE OUTLINE**

### (1) GENERAL

SCHOOL	School of Technology			
ACADEMIC UNIT	Department of Environmental Sciences			
LEVEL OF STUDIES	Undergraduate			
COURSE CODE	AE806		SEMESTER	8th
COURSE TITLE	DEMOGRAPHY and NATURAL RESOURCES			
INDEPENDENT TEACHING ACTIV	IG ACTIVITIES		LY TEACHING HOURS	CREDITS
Teaching Hours			3	3
COURSE TYPE	Specialised general knowledge			
PREREQUISITE COURSES	None			
LANGUAGE OF INSTRUCTION and	Greek			
EXAMINATIONS				
IS THE COURSE OFFERED TO	No			
ERASMUS STUDENTS				
COURSE WEBSITE (URL)	https://eclass.uth.gr/courses/ENV_U_178/			

### (2) LEARNING OUTCOMES

#### Learning outcomes

The aim of the course is to present contemporary scientific approaches and developments regarding the bidirectional relationship between demographics and natural resources. Specifically, it will cover the impacts of demographic characteristics on economic development, employment, investment, savings, and economic–productive activities in coastal areas. Additionally, the course will analyze the correlation between a dynamic demographic profile (i.e. 'young' population) and economic development, the nature and volume of demand, employment policies for the active population, innovation, dynamism, and creativity. Finally, it will address the implications of population aging, including its impact on insurance costs and production costs.

Upon successful completion of the course, students will have acquired the necessary knowledge, skills and competence, and will be able to:

- Apply theories and concepts of economic demography, demographic data sources, demographic tools, methods and techniques of demographic analysis, and the socio-economic impacts of demographic changes with a focus on natural resources.
- Comprehend what demography is, its scope, its different fields, branches, and current areas of application.
- Understand the primary sources of data used in demographic analysis, demographic indicators, and demographic methods and techniques.
- Analyse and manage aspects of the socio-economic impacts resulting from demographic changes and the future prospects of population dynamics in relation to natural resources.
- Delve into the most recent trends that already differ from those of the previous century and highlight the major demographic challenges of the coming decades.

#### General Competences

- Adapting to new situations
- Decision-making
- Working independently
- Team work
- Respect for the natural environment
- Production of free, creative and inductive thinking

### (3) SYLLABUS

- Introduction to Demography: Basic concepts, significance of demographic characteristics, and developments.
- Sources of demographic data: population censuses, registries, etc.

- Tools of demographic analysis. Methods and techniques of demographic analysis.
- Macroeconomic impacts of demographic changes.
- Demographic transition and economic development on a global and European level.
- Analysis of the correlation between a dynamic or static demographic profile and economic development.
- Demography: Economic and social policies.
- The demographic situation of Greece within the context of the European Union.
- Population pressures and natural resources; natural resources of Greece.
- Demographic situation demographic prospects and natural resources.
- Impacts of demography on economic development, employment, investment, savings, and economicproductive activities related to natural resources.
- Case studies.

## (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	20			
	Laboratory practice	10			
	Study and analysis of bibliography	30			
	Essay writing	15			
	Course total	75			
	(25 hours workload per credit)				
STUDENT PERFORMANCE	Students' performance is evaluated in the Greek language. The final				
EVALUATION	grade is determined by:				
	• A midterm exam (optional) that contributes 40% to the final				
	grade, applying one or more of the following evaluation methods: Multiple choice questions, short-answer questions, problem solving.				
	• A Final written examination (at the end of the semester) that				
	contributes 60% to the final grade, (or 100% if there is no midterm				
	grade) applying one or more of the following evaluation methods:				
	<ul> <li>Multiple choice questions, short-answer questions, problem solving.</li> <li>Alternatively, instead of taking the midterm exam, students may</li> </ul>				
	choose to submit a semester project that contributes 40% to the final grade. The essay may be presented by the students in class.				
	Final Grade = 60% Exam Grade + 40% Midterm exam/Project Grade				

### (5) ATTACHED BIBLIOGRAPHY

- Chalkos, G. (2016) *Economics of Natural Resources & Environment*. Thessaloniki: Disigma Publications. (in Greek)
- Tietenberg, T., Lewis, L. (2010) *Environmental and Natural Resource Economics*. Athens: Gutenberg George & Kostas Dardanos (in Greek)
- Tragakis, A., Bagavos, Ch., Dounas, D. (2016) *On Demography and Population Developments*. Kallipos Repository Open Academic Editions. <u>www.kallipos.gr</u> (in Greek)