



COURSE OUTLINE

(1) GENERAL

SCHOOL	School of Technology		
ACADEMIC UNIT	Department of Environmental Sciences		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	AY306	SEMESTER	3rd
COURSE TITLE	AQUATIC ECOSYSTEMS		
INDEPENDENT TEACHING ACTIVITIES		WEEKLY TEACHING HOURS	CREDITS
Teaching 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_145		

(2) LEARNING OUTCOMES

Learning outcomes
The goal of the course is for students to become familiar with aquatic ecosystems and their biotic and abiotic characteristics, so that they acquire the basic knowledge required to be able to make management decisions regarding the fate of such ecosystems in the future. Upon successful completion of the course, students will have further developed the following skills: <ul style="list-style-type: none">• Ability to understand the basic biotic and abiotic characteristics of aquatic ecosystems.• Ability to make management decisions regarding the fate of such ecosystems in the future.
General Competences
<ul style="list-style-type: none">• Searching, analyzing and synthesizing data• Decision making• Autonomous Work• Teamwork• Respect for the natural environment• Exercise criticism and self-criticism• Promotion of free, creative and inductive thinking

(3) SYLLABUS

<ul style="list-style-type: none">• Physicochemical parameters of water environment.• The organisms of aquatic ecosystems.• The water column.• Productivity and food webs.• Energy transfer.• Coastal ecosystems.• Seas and Oceans.• Island Biogeography.• Internal waters.• Anthropogenic impacts.
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(4) TEACHING and LEARNING METHODS – EVALUATION

DELIVERY	Face-to-face	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	<ul style="list-style-type: none"> • Use of PowerPoint slides • View material in video • Communication with students via e-mail • Use of asynchronous distance learning (e-class) 	
TEACHING METHODS	Activity	Semester workload
	Lectures	39
	Study and analysis of bibliography	50
	Weekly personal reports on essay writing	23
	Essay writing	13
	Course total (25 hours workload per credit)	125
STUDENT PERFORMANCE EVALUATION	<p>Students' performance is evaluated in the Greek language. The final grade is determined by:</p> <ul style="list-style-type: none"> • 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 or group project that contributes 30% to the final grade. <p>Final Grade = 70% Exam Grade + 30% Assignment Grade</p>	

(5) ATTACHED BIBLIOGRAPHY

<ul style="list-style-type: none"> • Barnes, R. S. K. (1991) <i>Fundamentals of Aquatic Ecology</i> [electronic resource] Wiley UBCM ebooks • Barnes, R. S. K., Mann K. H. (1991) <i>Fundamentals of Aquatic Ecology</i>. Blackwell Scientific Publications • Castro, P., Huber, E. M. (1999) <i>Marine Biology</i>. Thessaloniki: University Studio Press. (in Greek) • Levinton, Jeffrey S. (2020) <i>Marine Biology: Function, Biodiversity, Ecology</i>. Nicosia: Broken Hill Publishers Ltd. (in Greek) • Sumich, James L. (1996) <i>An Introduction to the Biology of Marine Life</i>. (6th Edition), New York: McGraw-Hill Inc.
