

COURSE OUTLINE

1. GENERAL

SCHOOL	NATURAL SCIENCES		
ACADEMIC UNIT	BIOLOGY		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	BIO_00A	SEMESTER	6-8
COURSE TITLE	MARINE ECOLOGY		
INDEPENDENT TEACHING ACTIVITIES		WEEKLY TEACHING HOURS	CREDITS
	Lectures, Laboratory Exercises, Field Work Exercise	5	6
COURSE TYPE	Field of Science, Skills Development		
PREREQUISITE COURSES	NO		
LANGUAGE OF INSTRUCTION and EXAMINATIONS	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes		
COURSE WEBSITE (URL)	https://eclass.upatras.gr/courses/BIO224/		

2. LEARNING OUTCOMES

Learning outcomes
In the end of the course the student should be able to: <ol style="list-style-type: none"> 1. understand the principles of physical and chemical oceanography 2. discuss issues relevant to the processes regulating primary and microbial productivity 3. comprehend the structure and functioning of the pelagic and the benthic environment and their interaction 4. perceive the principles of fisheries biology 5. comprehend the role of human-induced effects on the marine environment.
General Competences
By the end of this course the student will have developed the following General Abilities : <ol style="list-style-type: none"> 1. Autonomous (Independent) work 2. Group work 3. Generation of new research ideas 4. Respect for the natural environment 5. Development of free, creative and inductive thinking <p>Additionally, by the end of this course the student will have developed the following Special skills/competences:</p> <ol style="list-style-type: none"> 1. ability to measure basic environmental parameters 2. knowledge of methods for the collection of plankton and benthic samples 3. ability to identify basic taxa from plankton and benthos 4. ability to evaluate the effects of environmental characteristics on the distribution of marine organisms.

3. SYLLABUS

Classification of marine environments and marine organisms. The abiotic environment. Phytoplankton and primary production. Zooplankton. Nekton and fisheries biology. Benthic communities. Energy flow and mineral cycling. Human impacts on marine biota.
--

4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	Face-to-face
USE OF INFORMATION AND COMMUNICATIONS	PowerPoint presentations. Support of

TECHNOLOGY	educational procedure using the e-class electronic platform.	
TEACHING METHODS	Activity	Semester workload
	Lectures (13 weeks x 2 hours per week)	26
	Laboratory exercises (6 weeks x 3 hours per week)	18
	Field exercise	6
	Home study	100
	Course total	150
STUDENT PERFORMANCE EVALUATION	<p>Written exams (at the semester's end), in Course theory and lab. Language: Greek. Exams through short answer questions.</p> <p>Final Course Grade: Theory Grade x 0.9 + Laboratory Grade x 0.1</p> <p>Grading scale: 1-10. Passing grade: 5</p>	

5. ATTACHED BIBLIOGRAPHY

Suggested bibliography:

1. Castro P., Huber ME 2022. Marine Biology. Utopia Editions. (in Greek)
2. Nybakken JW 2009 (6th edition). Marine Biology – An Ecological Approach. (in Greek)

Related academic journals:

1. Marine Ecology Progress Series
2. Marine Ecology
3. ICES Journal of Marine Science