COURSE OUTLINE

(1) GENERAL INFORMATION

FACULTY / SCHOOL	MARITIME AND INDUSTRIAL STUDIES		
DEPARTMENT	MARITIME STUDIES		
LEVEL OF STUDY	UNDERGRADUATE		
COURSE UNIT CODE	NA208	**SEMESTER**	2
COURSE TITLE	Marine Ecology		
INSTRUCTOR'S NAME	Assistant Professor Anastasia Christodoulou		

INDEPENDENT TEACHING ACTIVITIES *in case credits are awarded for separate components/parts of the course, e.g. in lectures, laboratory exercises, etc. If credits are awarded for the entire course, give the weekly teaching hours and the total credits*	**WEEKLY TEACHING HOURS**	**CREDITS**
	4	6
Add rows if necessary. The organization of teaching and the teaching methods used are described in detail under section 4		

COURSE TYPE *Background knowledge, Scientific expertise, General knowledge, Skills development,*	Background knowledge
PREREQUISITE COURSES:	
LANGUAGE OF INTRODUCTION:	Greek
LANGUAGE OF EXAMINATION/ASSESSMENT:	
THE COURSE IS OFFERED TO ERASMUS STUDENTS:	
COURSE WEBSITE (URL):	eclass.unipi.gr

(2) LEARNING OUTCOMES

Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate (certain) level, which students will acquire upon successful completion of the course, are described in detail.

It is necessary to consult:

APPENDIX A

- *Description of the level of learning outcomes for each level of study, in accordance with the European Higher Education Qualifications' Framework.*
- *Descriptive indicators for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and*

APPENDIX B

- *Guidelines for writing Learning Outcomes*

Upon completion of the course, students should be able to:

- Describe the basic components of marine ecosystems, including the biotic and abiotic factors that influence them.
- Assess the impact of human activities, such as pollution, overfishing, and climate change on marine ecosystems.
- Apply methods for the sustainable extraction and use of marine resources, considering environmental, social, and economic impacts.
- Analyze the policies and governance frameworks related to marine resources and sustainable development.
- Interpret the principles of blue growth and evaluate opportunities for sustainable economic development through the use of marine resources.

General Competences

Taking into consideration the general competences that students/graduates must acquire (as those are described in the Diploma Supplement and are mentioned below), at which of the following does the course attendance aim?

Search for, analysis and synthesis of data and information by the use of appropriate technologies,
Adapting to new situations
Decision-making
Individual/Independent work
Group/Team work
Working in an international environment
Working in an interdisciplinary environment
Introduction of innovative research
Project planning and management
Respect for diversity and multiculturalism
Environmental awareness
Social, professional and ethical responsibility and sensitivity to gender issues
Critical thinking
Development of free , creative and inductive thinking
……..
(Other……citizenship, spiritual freedom, social awareness, altruism, etc.)
……..

- Search for, analysis and synthesis of data and information by the use of appropriate technologies
- Adapting to new situations
- Individual/Independent work
- Group/Team work
- Working in an international environment
- Working in an interdisciplinary environment
- Environmental awareness
- Critical thinking
- Development of free, creative and inductive thinking

(3) COURSE CONTENT

- Introduction to marine ecosystems (definition and significance)
- Major threats to marine ecosystems: Pollution, overfishing, climate change
- Eutrophication
- Climate change and marine ecosystems
- Pollution from ships (atmospheric and marine)
- Sustainable management of marine resources: Strategies for sustainable use, legislation, and policy frameworks
- Ecosystem-based management approach
- Marine Protected Areas (MPAs)
- Sustainable fisheries
- Economic dimensions of sustainable marine resource management (Blue Economy)
- Marine governance: Role of governments and international organizations

(4) TEACHING METHODS – ASSESSMENT

MODES OF DELIVERY *Face-to-face, in-class lecturing, distance teaching and distance learning, etc.*	Face-to-face
USE OF INFORMATION AND COMMUNICATION TECHNOLOGY *Use of ICT in teaching, Laboratory Education, Communication with Students*	Use of ICT in teaching and communication with Students
COURSE DESIGN *Description of teaching techniques, practices and methods:* *Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, Internship, Art Workshop, Interactive teaching, Educational visits, projects, Essay writing, Artistic creativity etc.* *The study hours for each learning activity as well*	

Activity/Method	***Semester workload***
Lectures	52
Non-guided study	98
Total	**150**

as the hours of self-study are given following the principles of ECTS.		
STUDENT PERFORMANCE EVALUATION/ASSESSMENT METHODS *Detailed description of the evaluation procedures:* *Language of evaluation, assessment methods, formative or summative (conclusive), multiple choice tests, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral exam, presentation, laboratory work, other….,etc.* *Specifically defined evaluation criteria are stated, as well as if and where they are accessible by the students*	a) Class participation, assignments, case studies, exercises (20%) b) Written examinations (80%): A final written exam	

(5) SUGGESTED BIBLIOGRAPHY

- *Suggested bibliography:*

▪ Θαλάσσια Βιολογία, Levinton Jeffrey S., Broken Hill Publishers Ltd.
▪ Course slides
▪ Selected academic articles

- *Related scientific journals:*

▪ Transportation Research Part D
▪ Marine Policy
▪ Marine Pollution Bulletin
▪ Ocean and Coastal Management