COURSE OUTLINE

(1) GENERAL

SCHOOL	School of Environment			
ACADEMIC UNIT	Department of Environment			
LEVEL OF STUDIES	Undergraduate			
COURSE CODE	104Y	SEMESTER 3		
COURSE TITLE	Introduction to Ecology			
INDEPENDENT TEACHING ACTIVITIES		WEEKLY TEACHING HOURS	CREDITS	
	Lectures		3	
Total credits				5
COURSE TYPE	General background			
PREREQUISITE COURSES:	-			
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek			
IS THE COURSE OFFERED TO	Yes. The course is taught in Greek. For exchange students,			
ERASMUS STUDENTS	English literature is proposed, and examinations are given in English.			
COURSE WEBSITE (URL)	https://www.env.aegean.gr/all_courses/introduction-to-ecology/			

(2) LEARNING OUTCOMES

Learning outcomes

This introductory course aims at describing the fundamentals of biological organization (from populations to ecosystems and landscapes) as well as the core methods, concepts and processes of the living world and the biosphere.

Upon completion of this course, students are expected to understand and master:

- Initial concepts of Population, Community and Ecosystems Ecology together with essential principles of evolutionary and functional Ecology.
- Tools of Ecology
- Knowledge on impacts (man-made and natural) upon the functioning and integrity of natural systems.

General Competences

Search for, analysis and synthesis of data and information, with the use of the necessary technology Working independently

Team work

Respect for the natural environment

(3) SYLLABUS

- An Introduction to Ecology
- Resources and conditions
- The World's biomes
- General principles of Population ecology
- Biotic interactions
- Population dynamics
- Energy flow through ecosystems
- Biogeochemical cycles
- Ecosystem productivity
- Ecological Succession
- Introduction to biological diversity

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	Face-to-face			
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	The course is based on Moodle Platform (notes, presentations-ppts', communication with students).			
TEACHING METHODS	Activity	Semester workload		
	Lectures	13 weeks x 3hours/week = 39		
	Study and analysis of literature	94		
	Written Tests	6		
	Course total	139		
STUDENT PERFORMANCE EVALUATION	Language of evaluation: Greek (English for foreign students)			
	Methods of evaluation: two written tests (mid-semester test:30%, Final exam: 70% of the grade) (Multiple Choice Questions, Short statements on specific questions, Critical Arguments on scientific judgment issues).			

(5) ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

Relyea, R., Ricklefs, R. 2019. Οικολογία, η οικονομία της φύσης. Broken Hill/Πασχαλίδης. Αθήνα.

Molles MC. 2008. Οικολογία, έννοιες και εφαρμογές. Εκδόσεις Μεταίχμιο. Αθήνα.

Nentwig W., Bacher S., Brandl R. 2011. Βασικές Έννοιες Οικολογίας. Εκδόσεις Κλειδάριθμος. Αθήνα

Βερεσόγλου Δ. 2010. Οικολογία. Εκδόσεις Δ. Γαρταγάνης. Αθήνα

Begon, M., Harper J.L., Townsend, C.R. 2021. Ecology: Individuals, Populations and Communities, Blackwell Science Inc. (5th Edition).

Townsend, C.R., Begon, M., Harper J.L., 2014. Essentials of Ecology (4th ed.), Blackwell Science Inc.

- Related academic journals:

Ecology, Journal of Ecology, Ecology Letters