

## COURSE OUTLINE

### (1) GENERAL

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

### (2) LEARNING OUTCOMES

<b>Learning outcomes</b>
<p>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.</p> <p>Upon completion of this course, students are expected to understand and master:</p> <ul style="list-style-type: none"> <li>• Initial concepts of Population, Community and Ecosystems Ecology together with essential principles of evolutionary and functional Ecology.</li> <li>• Tools of Ecology</li> <li>• Knowledge on impacts (man-made and natural) upon the functioning and integrity of natural systems.</li> </ul>
<b>General Competences</b>
<p>Search for, analysis and synthesis of data and information, with the use of the necessary technology</p> <p>Working independently</p> <p>Team work</p> <p>Respect for the natural environment</p>

### (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

<b>DELIVERY</b>	Face-to-face														
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	The course is based on Moodle Platform (notes, presentations-ppts', communication with students).														
<b>TEACHING METHODS</b>	<table border="1"><thead><tr><th><i>Activity</i></th><th><i>Semester workload</i></th></tr></thead><tbody><tr><td>Lectures</td><td>13 weeks x 3hours/week = 39</td></tr><tr><td>Study and analysis of literature</td><td>94</td></tr><tr><td>Written Tests</td><td>6</td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td>Course total</td><td><b>139</b></td></tr></tbody></table>	<i>Activity</i>	<i>Semester workload</i>	Lectures	13 weeks x 3hours/week = 39	Study and analysis of literature	94	Written Tests	6					Course total	<b>139</b>
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Course total	<b>139</b>														
<b>STUDENT PERFORMANCE EVALUATION</b>	Language of evaluation: Greek (English for foreign students)  Methods of evaluation: two written tests (50% of the total grade each) (Multiple Choice Questions, Short statements on specific questions, Critical Arguments on scientific judgment issues).														

### (5) ATTACHED BIBLIOGRAPHY

- *Suggested bibliography:*

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

Βώκου Δ. 2009. Γενική Οικολογία: Μια εισαγωγή. University Studio Press, Θεσσαλονίκη

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

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

Begon, M., Harper J.L., Townsend, C.R. 2006. Ecology: Individuals, Populations and Communities, Blackwell Science Inc.

Townsend, C.R., Begon, M., Harper J.L., 2009. Essentials of Ecology (3<sup>rd</sup> ed.), Blackwell Science Inc

- *Related academic journals:*

Ecology, Journal of Ecology, Ecology Letters