

<b>Title</b>	<b>Terrestrial Ecosystems</b>
<b>Code:</b>	125KEY
<b>Semester:</b>	5
<b>Teaching Credits:</b>	5
<b>ECTS Credits:</b>	5
<b>Prerequisite Courses:</b>	-
<b>Course type:</b>	Special background
<b>Instructor:</b>	Triantafillos Akriotis
<b>Learning Objectives</b>	<p>After successful completion of the course, students will be able to:</p> <ul style="list-style-type: none"> <li>• understand the basic elements of the structure and function of terrestrial ecosystems and living organisms on land</li> <li>• know the main biotic and abiotic factors affecting living organisms on land</li> <li>• apply their knowledge of the properties and functioning of terrestrial ecosystems and their organisms in their management and conservation</li> </ul>
<b>Course Structure</b>	
Weekly topics:	<p>Lectures and tutorials on the following topics:</p> <ol style="list-style-type: none"> <li>1. Introduction, temperature, humidity, soil</li> <li>2. Global vegetation zones and ecosystems</li> <li>3. Conditions: general concepts. Temperature.</li> <li>4. Temperature regulation mechanisms</li> <li>5. Endotherm metabolism and energy balance.</li> <li>6. Metabolic rate and body size.</li> <li>7. Effect of temperature at the populations and species distribution level. Impact of climate change.</li> <li>8. Humidity, snow, pH and other conditions.</li> <li>9. Temperature and light as stimuli.</li> <li>10. Photosynthesis, compensation points. Photosynthetic energy balance and productivity.</li> <li>11. Resources: introduction. Defense mechanisms of plants and animals.</li> <li>12. Grazing: effects on organisms, species and ecosystems.</li> <li>13. Social systems in animals – space as a resource: territories and social systems.</li> </ol> <p>Field trip: forest ecosystems</p>
Theory – Lectures (hours / week):	3
Exercises – Laboratories (hours / week):	
Other Activities:	1 field trip
Grading:	Language of evaluation: Greek

	Interim test (multiple choice question quiz) (10%)  Written examination (90%)
<b>Resources</b>	
Notes:	Lecture notes and powerpoint presentations
Basic Textbook:	Molles, M.C. & Sher, A.A. 2021. Οικολογία. 1η ελληνική έκδοση. Broken Hill Publishers [ελληνική μετάφραση]  Begon, M., J.L. Harper & C.R. Townsend. 2015. Οικολογία. 1η ελληνική έκδοση. ΥΤΟΡΙΑ ΕΚΔΟΣΕΙΣ Μ. ΕΠΕ.
Language:	Greek
Internet Links:	