

Course Title	Ecology and Biodiversity Conservation				
Course Code	ABF 200				
Course Type	Theory				
Level	Undergraduate				
Year / Semester	2 nd year, semester -Fall				
Teacher's Name	Dr. Menelaos Stavrinides (80%), Dr. Nikolaos Nikoloudakis (20%)				
ECTS	4	Lectures / week	2 x 1.5hr	Laboratories / week	---
Course Purpose and Objectives	The course aims at promoting an understanding of the basic principles of ecology and their application to agricultural and environmental issues.				
Learning Outcomes	<p>Upon the successful completion of the course students are expected to be able to:</p> <ul style="list-style-type: none"> • Present the basic principles of the evolutionary process governing life on earth, describe and differentiate biotic from abiotic factors in an ecosystem and discuss the factors that govern population growth • Recognize and compare individual and species interactions, such as competition, predation, parasitism and mutualism • Analyze the impacts of humans on the planet, especially with regards to agriculture and the stages of succession • Discuss and quantify the importance of key ecosystem services and interpret the results of laboratory and field studies • Investigate an ecological problem and present their results in writing and orally 				
Prerequisites		Required			
Course Content	<p>The course begins with a discussion of the importance of Ecology and its applications in agriculture and environmental science. We continue with a short description of the theory of evolution and the differentiation of the main life forms on the planet.</p> <p>We will then discuss the impact of the abiotic environment on organisms, explain the main factors influencing population growth, and analyze species interactions, such as predation, parasitism, competition and mutualism. We move on to identify the building components of communities and ecosystems and discuss the concepts of mass and energy flows. An extensive discussion of the hydrological, carbon, nitrogen and phosphorus cycles follows.</p>				



	In the last part of the course, we will cover topics of special interest for Cyprus, including invasive species, agricultural ecosystems, biodiversity conservation and ecosystem services.
Teaching Methodology	<ul style="list-style-type: none"> • Lectures • Group discussion • Videos and animations • Field visits • Presentation and discussion of group projects
Bibliography	<ol style="list-style-type: none"> 1. Veresglou. 2010. Ecology. Gartagani Press. ISBN 978-960-7013-36-1 (In Greek) 2. Sparrow DJ, John E(Eds). 2016. An Introduction to the Wildlife of Cyprus. Terra Cypria. 895 pp. ISBN 978-9963-601-45-5 3. Ecology: The experimental analysis of distribution and abundance. 6th edition. Krebs. 2009. Benjamin Cummings. ISBN 978-032-150-743-3
Assessment	<p>20 points group project and presentation</p> <p>30 points midterm exam</p> <p>50 points final exam</p> <p>Total: 100 points</p>