

MODULE DESCRIPTION

General

School	Geotechnical Sciences
Department	Forest and Natural Environment Sciences

Module Information

Title	Conservation Biology
Course Code	Opt.8
Level of Studies	Undergraduate
Teaching Period	Spring Term
Attendance Type	Elective Compulsory
Prerequisites	Wildlife Biology, Systematic Botany, Forest Botany

Orientation	Weekly Hours		Year	Semester	ECTS
	Lectures	Laboratory work			
ECOLOGY AND BIODIVERSITY CONSERVATION	2	1	3	6	3

Faculty Instructor

Liordos Vasilios, Tsiftsis Spyridon

Type of Module

- General Foundation
- Specific Foundation / Core
- Knowledge Deepening / Consolidation

Mode of Delivery

- Face to face
- Distance learning

Digital Module availability

- E-Study Guide
- Departments Website
- E-Learning

Language

	Teaching	Examination
Greek	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
English	<input type="checkbox"/>	<input type="checkbox"/>

Erasmus

- The course is offered to exchange programme students

Learning Outcomes

Upon successful completion of the course, students should be able to design and apply studies and to evaluate and analyze conservation biology related issues. In particular, they will have to:

- Have a general knowledge and understanding of conservation biology issues in Greece.
- Know how to prepare synthetic studies that comprehensively analyze the several aspects concerning conservation biology related issues, taking into account the specific local characteristics and the various environmental, ecological and anthropogenic factors possibly affecting them.
- Be capable of reviewing relevant Greek and international scientific literature, so to formulate informed views and judgements on conservation biology related issues.
- Know how to communicate information, ideas, issues and answers to both expert and non-expert audience.
- Have developed the knowledge acquisition skills necessary for further studies.

List of General Competences

- Apply knowledge in practice
- Work autonomously
- Work in teams
- Work in an international context
- Work in an interdisciplinary team
- Respect natural environment
- Advance free, creative and causative thinking

Module Content (Syllabus)

The new science of conservation biology. The philosophical origins of conservation biology. The international field of conservation biology. The moral values of conservation biology. What is biodiversity? Biodiversity levels. Species diversity. Genetic diversity. Ecosystem diversity. Ecosystem dynamics. Global biodiversity. The value of biodiversity. Ecological economics and Environmental economics. Direct economic values. Indirect economic values. Existence values. Environmental ethics. Biodiversity threats. Human over population effects. Habitat loss. Habitat fragmentation. Environmental degradation and pollution. Global climate change. Overexploitation. Biological invasions. Diseases. Extinctions are forever. The meaning of "extinction". Extinction rates. How prone are species to extinction? Problems of small populations. Population and species conservation. Applied population biology. Establishing new populations. Ex situ conservation strategies. Protected areas. Designation and classification of protected areas. Designing protected areas. Challenges in park management. Conservation outside protected areas. Non-protected public and private areas. Ecosystem management. Working with the locals. Ecosystem restoration. The challenge of sustainable development. Sustainable development at the local level. Conservation at the national level. International sustainable development approaches. Financing conservation. Education for conservation.

Educational Material Types

- Book
- Notes
- Slide presentations
- Video lectures
- Multimedia
- Interactive exercises
- Other:

Use of Information and Communication Technologies

- Use of ICT in Course Teaching
- Use of ICT in Laboratory Teaching
- Use of ICT in Communication with Students
- Use of ICT in Student Assessment

Module Organization

Please fill in the workload of each course activity

Course Activity	Workload (hours)
Lectures	26
Laboratory work	13
Field Trip/Short Individual Assignments	20
Independent Study	16
Total	75

* 1 ECTS unit corresponds to 25 hours of workload

Student Assessment Methods

- Written Exam with Multiple Choice Questions
- Written Exam with Short Answer Questions
- Written Exam with Extended Answer Questions
- Written Assignment
- Report
- Oral Exams
- Laboratory Assignment

Suggested Bibliography (Eudoxus and additional bibliography)

- Primack R, Arianoutsou M, Dimitrakopoulos P. 2017. Conservation Biology. University Studio Press
- Methodology textbooks available at the department's library
- All relevant text books and journals available at the department's library and online