

COURSE OUTLINE

(1) General information

FACULTY/SCHOOL	TECHNOLOGY		
DEPARTMENT	ENVIRONMENTAL SCIENCES		
LEVEL OF STUDY	<i>Undergraduate</i>		
COURSE UNIT CODE	NEW COURSE	SEMESTER	8 th
COURSE TITLE	CONSERVATION OF BIODIVERSITY		
INDEPENDENT TEACHING ACTIVITIES in case credits are awarded for separate components/parts of the course, e.g. in lectures, laboratory exercises, etc. If credits are awarded for the entire course, give the weekly teaching hours and the total credits		WEEKLY TEACHING HOURS	CREDITS
THEORETICAL BACKGROUND		3	3
COURSE TYPE Background knowledge, Scientific expertise, General Knowledge, Skills Development	ENVIRONMENTAL MANAGEMENT AND EXCLUSION		
PREREQUISITE COURSES:	NO		
LANGUAGE OF INSTRUCTION & EXAMINATION/ASSESSMENT:	GREEK		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	YES		
COURSE WEBSITE (URL)			

(2) LEARNING OUTCOMES

<p>Learning Outcomes</p> <p><i>The course learning outcomes, specific knowledge, skills and competences of an appropriate (certain) level, which students will acquire upon successful completion of the course, are described in detail. It is necessary to consult:</i></p> <p>APPENDIX A</p> <ul style="list-style-type: none"> • <i>Description of the level of learning outcomes for each level of study, in accordance with the European Higher Education Qualifications' Framework.</i> • <i>Descriptive indicators for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and</i> <p>APPENDIX B</p> <ul style="list-style-type: none"> • <i>Guidelines for writing Learning Outcomes</i>
<p>Students are expected to understand the modern theories on the biodiversity of species and ecosystems and the role that Biology plays in their preservation. Conservation Biology is a comprehensive, interdisciplinary scientific field that has developed in response to the challenge of conserving the biodiversity of species and ecosystems, taking measures to protect habitats, over-exploitation, climate change and more generally. It also addresses the threats and dangers of natural disasters and man-made actions on the loss of habitats of its species (flora and fauna) and rationally addresses their consequences, based on the sustainable sustainability of ecosystems for conservation of biodiversity.</p>

. Upon successful completion of the course, the student will be able to:

1. To develop and cultivate the necessary knowledge and skills, which will be used as tools for understanding Biodiversity and the ethical principles of Conservation Biology.
2. To understand the principles and procedures of the structure and operation of the Ecosystem
3. To know the range of biological diversity and to investigate the effect of human actions on species, genetic diversity and ecosystems.
4. To assess the threats and dangers of natural disasters and man-made actions on the loss of habitats of its species (flora and fauna) and to deal rationally with their consequences, based on the sustainable sustainability of Ecosystems for conservation of Biodiversity.
5. To learn the type of measures and actions required for the maintenance of Biodiversity for both (in situ) and for (ex situ) sustainable use and conservation of species.
6. To develop practical approaches aimed at preventing the extinction of species, conserving genetic diversity, and protecting and restoring biocommunities and ecosystems.

General Competences

Taking into consideration the general competences that students/graduates must acquire (as those are described in the Diploma Supplement and are mentioned below), at which of the following does the course attendance aim?

Search for, analysis and synthesis of data and information by the use of appropriate technologies, Adapting to new situations Decision-making Individual/Independent work Group/Team work Working in an international environment Working in an interdisciplinary environment Introduction of innovative research

Project planning and management Respect for diversity and multiculturalism Environmental awareness Social, professional and ethical responsibility and sensitivity to gender issues Critical thinking Development of free, creative and inductive thinking (Other.....citizenship, spiritual freedom, social awareness, altruism etc.)

- Adaptation to new situations
- Work in an interdisciplinary environment
- Production of new research ideas
- Respect for the natural environment
- Practice criticism and self-criticism
- Promoting free, creative and inductive thinking

(3) COURSE CONTENT

Theory

1. Biology of conservation. The international field of Conservation Biology. Global biodiversity protection.
2. Definition of biodiversity, Rio's Convention on Biological Diversity. Use and restoration of Ecosystems. Sustainability and sustainability.
3. Variety of Species, Genetic Variety, Variety of Species and Ecosystems.
4. Value of biodiversity, Ecological-Economic and Environmental-Economic. Caring for a sustainable future, biodiversity assessment.

5. Threats to biodiversity: Loss of habitat, fragmentation of habitat. Environmental degradation, consequences and consequences.
6. Global climate change. Atmospheric and Water pollution. Dangerous chemicals. Environmental hazards and human health.
7. Mapping biodiversity. Biogeographical areas. Endemism. Over-exploitation. Biological invaders. Illnesses. Particularly environmentally friendly.
8. Island Ecology and conservation. Anthropogenic losses and threats to island ecosystems.
9. Disappearances - Disappearance rhythms. Preservation of populations and species. Protection of natural resources.
10. Protected areas - management. Preservation outside protected areas.
11. Effect of environmental parameters and anthropogenic effects on biodiversity, in agricultural and natural ecosystems, in plant and animal species.
12. Principles and measures of biodiversity management, conservation prospects. Hellenic Strategy for the Preservation of Biodiversity.
13. Organic farming and biodiversity. Biodiversity of forest and agricultural ecosystems.

(4) TEACHING METHODS-ASSESSMENT

<p>MODES OF DELIVERY Face-to-face, in-class lecturing, distance teaching and distance learning etc.</p>	<ul style="list-style-type: none"> • Lectures in the classroom or by distance • Team discussion 											
<p>USE OF INFORMATION AND COMMUNICATION TECHNOLOGY Use of ICT in teaching, Laboratory Education, Communication with students</p>	<ul style="list-style-type: none"> • Powerpoint. • View video material. • e-mail. • e-class 											
<p>COURSE DESIGN Description of teaching techniques, practices and methods: Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, Internship, Art Workshop, Interactive teaching, Educational visits, projects, Essay writing, Artistic creativity, etc.</p> <p>The study hours for each learning activity as well as the hours of self-directed study are given following the principles of the ECTS.</p>	<table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: left;"><i>Activity/Method</i></th> <th style="text-align: right;"><i>Semester workload</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: right;">39</td> </tr> <tr> <td>Theory study</td> <td style="text-align: right;">16</td> </tr> <tr> <td>Team working</td> <td style="text-align: right;">20</td> </tr> <tr> <td>Course total (25 hours of workload per credit unit)</td> <td style="text-align: right;">75</td> </tr> </tbody> </table>		<i>Activity/Method</i>	<i>Semester workload</i>	Lectures	39	Theory study	16	Team working	20	Course total (25 hours of workload per credit unit)	75
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<p>STUDENT PERFORMANCE EVALUATION/ASSESSMENT METHODS Detailed description of the evaluation procedures:</p> <p>Language of evaluation, assessment methods, formative or summative (conclusive), multiple choice tests, short- answer questions, open-ended questions, problem solving, written work, essay/report, oral exam, presentation, laboratory work, other.....etc.</p>	<p><u>Students are assessed in Greek. The final grade is formed by tests which include:</u></p> <ul style="list-style-type: none"> • Written exam: 80% of the final grade (A) • Tasks: 20% of the final grade (B) <p style="text-align: center;">Final grade = 80% (A) + 20% (B)</p>											

Specifically, defined evaluation criteria are stated, as well as if and where they are accessible by the students.	
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(5) SUGGESTED BIBLIOGRAPHY:

Suggested bibliography:

1. Gaston Kevin J., Spicer John I. 2008. (In Greek) Biodiversity. ISBN: 978-960-12-1687-4. Publisher : UNIVERSITY STUDIO PRESS. Eudoxus Code: 17153
2. Veresoglou D., 2010 (3rd Edition in Greek). Ecology. ISBN: 978-960-7013-36-1. Publisher Savvas-Gartagannis, Eudoxus Code: 32998680
3. Primack R. B., 2017 A Primer of Conservation Biology, (Sinuer Publications) (In Greek) ISBN: 978-960-12-2331-5 Publisher: UNIVERSITY STUDIO PRESS. Eudoxus Code: 68369295