COURSE OUTLINE

1. GENERAL

SCHOOL	NATURAL SIENCES		
ACADEMIC UNIT	BIOLOGY		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	**BIO_BBΔ**	**SEMESTER**	**6-8**
COURSE TITLE	**BIODIVERSITY AND CONSERVATION BIOLOGY**		
INDEPENDENT TEACHING ACTIVITIES		**WEEKLY TEACHING HOURS**	**CREDITS**
	Lectures	2	3
COURSE TYPE	Scientific Area		
PREREQUISITE COURSES	Typically, there are no prerequisites. However, good knowledge of botany, zoology, mapping and assessment of ecosystems and ecology is recommended		
LANGUAGE OF INSTRUCTION and EXAMINATIONS	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes		
COURSE WEBSITE (URL)	https://eclass.upatras.gr/courses/BIO379/		

2. LEARNING OUTCOMES

Learning outcomes
At the end of the course the students will: • be able to understand the pressures and threats to biodiversity at local and national level. • be aware of the issues to biodiversity conservation at national, European and global level. • have understood the designation and assessment principles of protected areas by integrating education, applied scientific research and sustainable management.
General Competences
At the end of the course the students will develop the following skills: • detection and quantification capability • ability to implement biodiversity assessment methods • ability to use tools for the observation, conservation and management of threatened species/populations. At the end of the course, the students will also develop the following general competencies: 1) Autonomous work 2) Teamwork 3) Production of new research ideas 4) Respect for the natural environment 5) Promoting free, creative and inductive thinking.

3. SYLLABUS

1. Introduction to conservation biology - subject, philosophical roots, ethical principles.
2. Biodiversity - general concepts and terms, genetic diversity, diversity of species, habitats, ecosystems, landscapes, worldwide biodiversity distribution.
3. The value of biodiversity - direct and indirect economic values, long-term view, existence value, environmental ethics.
4. Threats to Biodiversity - current situation and predictions, habitat destruction and fragmentation, environmental degradation and pollution, global climate change, biodiversity overexploitation, biological invasions and diseases.
5. Extinction - general concepts, rates of extinction at various ecosystems and levels, island biogeography and extinction rate predictions, problems of small population and extinction vortex.

6. Conserving populations and species - population dynamics, applied population biology, conservation categories, legal protection of species, establishing new populations, ex situ conservation strategies.
7 Protected areas - establishment and classification - design and managing, landscape ecology.
8. Conservation outside protected areas - public and private lands, working with local people, ecosystem management and restoration.
9. Sustainable management and development at the local level, conservation at the national level, funding and conservation education.

4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	Face to face	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Support eLearning services through e-class platform	
TEACHING METHODS	***Activity***	***Semester workload***
	Lectures (13 weeks x 2 hours per week)	26
	Independent Study	124
	Course total	**150**
STUDENT PERFORMANCE EVALUATION	Written examinations (at the end of the semester), the theory of the course with 100% participation in the final grade. Scale: 1-10. Grade mark: 5	

5. ATTACHED BIBLIOGRAPHY

Suggested bibliography:

1) Teachers' notes.
2) Primack R. B., Arianoutsou M. & Dimitrakopoulos P. 2017. A Primer of Conservation Biology (in Greek).
3) Primack R. B. 2012. A Primer of Conservation Biology, Boston University.
4) Morris W. F. & Doak D. F. 2002. Quantitative Conservation Biology: Theory and Practice of Population Analysis

Related academic journals: