COURSE OUTLINE

(1) GENERAL

SCHOOL	Natural Sciences		
ACADEMIC UNIT	Biology		
LEVEL OF STUDIES	Graduate		
COURSE CODE	**BIO_ΣΤ1**	SEMESTER	6/8
COURSE TITLE	Biodiversity and Conservation Biology		

INDEPENDENT TEACHING ACTIVITIES *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits*	WEEKLY TEACHING HOURS	CREDITS
	2	3
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	Scientific Area
PREREQUISITE COURSES:	NO 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 (in English)
COURSE WEBSITE (URL)	https://eclass.upatras.gr/courses/BIO379/

(2) LEARNING OUTCOMES

Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing 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

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology	*Project planning and management*
Adapting to new situations	*Respect for difference and multiculturalism*
Decision-making	*Respect for the natural environment*
Working independently	*Showing social, professional and ethical responsibility and sensitivity to gender issues*
Team work	*Criticism and self-criticism*
Working in an international environment	*Production of free, creative and inductive thinking*
Working in an interdisciplinary environment	*……*
Production of new research ideas	*Others…*
	…….

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, Distance learning, etc.*	Face to face
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	Support eLearning services through e-class platform
TEACHING METHODS *The manner and methods of teaching are described in detail.* *Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.* *The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS*	*Activity* / *Semester workload* Lectures (13 weeks X 2 hours per week) — 26 Independent Study — 124 Course total — *150*
STUDENT PERFORMANCE EVALUATION *Description of the evaluation procedure* *Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other* *Specifically-defined evaluation criteria are given, and if and where they are accessible to students.*	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 Grade: 3 corresponds to grade ECTS F. Grade 4 corresponds to grade ECTS FX. The grade marks correspond to ECTS as follows: 5 = E, 6 = D, 7 = C, 8 = B, 9 = A.

(5) ATTACHED BIBLIOGRAPHY

- Suggested bibliography:
- Related academic journals:

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