

COURSE OUTLINE

(1) GENERAL

SCHOOL	NATURAL SCIENCES		
ACADEMIC UNIT	BIOLOGY		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	BIO_ΣΤ2	SEMESTER	6/8
COURSE TITLE	BIOGEOGRAPHY		
INDEPENDENT TEACHING ACTIVITIES <i>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</i>	WEEKLY TEACHING HOURS	CREDITS	
Lectures , Laboratory Exercises	2 (lec) + 2 (lab)	6	
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>	Field of Science Skills Development		
PREREQUISITE COURSES:	NO Formally, there are no prerequisite courses. Nevertheless, a good knowledge of evolutionary biology, zoology, botany, and ecology highly recommended. Some knowledge of basic statistics would be useful.		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes (in English)		
COURSE WEBSITE (URL)	https://eclass.upatras.gr/courses/BIO377/		

(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*

By the end of this course the student should be able to:

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- 1) understand the spatial structure of biodiversity, 2) discuss major theories and concepts of modern biogeography, 3) understand common patterns and crucial processes of organisms' distribution in space, 4) make simple analyses of biogeographical data

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...

By the end of the course, the student will have developed the following **Special skills/competences**:

1) ability to identify important spatial patterns of organisms' distribution, 2) ability to make simple analyses of presence-absence data of species distributions, 3) ability to formalize biogeographical questions and to design simple biogeographical experiments

Additionally, by the end of this course the student will, furthermore, have develop the following

General Abilities:

1) Working independently, 2) Team work, 3) Generation of new research ideas, 4) Respect for the natural environment, 5) Development of free, creative and inductive thinking

(3) SYLLABUS

1) What is Biogeography? Some facts about the history of biogeography, 2) The history of the Earth: paleogeography & paleoecology, 3) Distribution patterns: Endemism, Provincialism, Biogeographical Regions. Disjunct distributions. 4) Biogeographical Processes: Vicariance, Dispersal, 5) Methods of Historical Biogeography: Phylogenetic Biogeography, Cladistic Biogeography, 6) Phylogeography, Parsimony Analysis of Endemism, 7) Island Biogeography. Types and characteristics of the islands, 8) Area / number of species, 9) Dynamic equilibrium theory, 10) Island formation patterns, 11) Island theory and management, 12) Human impact on island ecosystems, 13) Paleogeography, Paleoecology and current biogeography of the Greek Region

(4) TEACHING and LEARNING METHODS - EVALUATION

<p style="text-align: center;">DELIVERY <i>Face-to-face, Distance learning, etc.</i></p>	Face to face	
<p style="text-align: center;">USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY <i>Use of ICT in teaching, laboratory education, communication with students</i></p>	Support of educational procedure with use of the e-class electronic platform	
<p style="text-align: center;">TEACHING METHODS</p> <p><i>The manner and methods of teaching are described in detail.</i></p> <p><i>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.</i></p> <p><i>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</i></p>	Activity	Semester workload
	Lectures (13 weeks x 2 hours per week)	26
	Laboratory Exercises (4 weeks x 2 hours per week)	8
	Home study	116
Course total	150	
<p style="text-align: center;">STUDENT PERFORMANCE EVALUATION <i>Description of the evaluation procedure</i></p> <p><i>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</i></p> <p><i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i></p>	<p>1) Written exams (at the semester's end), accounting for the 80% of the Final Grade.</p> <p>2) Elaboration & Presentation of Laboratory Exercises (at the semester's end), accounting for the 20% of the Final Grade.</p> <p>Final Course Grade: Exams Grade x 0.6 + Laboratory's Exercises Grade x 0.2</p> <p>Grading scale: 1-10. Passing grade: 5</p> <p>Grading: 3 correspond to ECTS grade F. Grade 4 corresponds to ECTS grade FX.</p> <p>Passing grades correspond to ECTS grades as follows: 5=E, 6=D, 7=C, 8=B, 9=A</p>	

(5) ATTACHED BIBLIOGRAPHY

<p><i>- Suggested bibliography:</i></p> <p>1) Whittaker R. & Fernandez-Palacios J.M. (2010). Island Biogeography, 2) Lomolino M.V., Brown J.H. & Riddle B.R. (2010). Biogeography, 3) Pianka, R.E. (2006) Evolutionary Ecology, 4) Instructors' Notes</p> <p><i>- Related academic journals:</i></p>
