

SCHOOL	NATURAL SCIENCES		
ACADEMIC UNIT	BIOLOGY		
LEVEL OF STUDIES	POSTGRADUATE		
COURSE CODE	GBIO_OKYA1	SEMESTER	1 st
COURSE TITLE	Sampling Design, Environmental Data Analysis and Ecological Models		
INDEPENDENT TEACHING ACTIVITIES	WEEKLY TEACHING HOURS	CREDITS	
Lectures, Laboratory Exercises	13	9	
COURSE TYPE	Specialised general knowledge, 2) skills development		
PREREQUISITE COURSES	NO. Formally, there are no prerequisite courses. Nevertheless, a good knowledge of ecology and some expertise of basic statistics is recommended		
LANGUAGE OF INSTRUCTION and EXAMINATIONS	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	NO		
URL			
Learning outcomes			
At the end of the course, students should be able to: (1) formulate valid scientific questions and hypotheses about the ecology of organisms, (2) understand sampling methods and strategies, (3) to design ecological experiments and sampling, (4) to analyze ecological data according to query and data type, (5) understand the concepts and types of ecological models, (6) to construct ecological models.			
General Competences			
At the end of the course, students will have developed the following skills: (1) ability to design simple yet valid experiments to study the ecology of organisms, (2) ability to analyze primary ecological data, (3) ability to evaluate and present ecological analyses.			
Teaching and Learning methods-Evaluation			
DELIVERY	Face to Face		
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	(1) Use of computers and special software during the course by the instructors and the students. (2) Support of educational procedure with use of the e-class electronic platform.		
TEACHING METHODS	Activity	Semester workload	
	Lectures and Laboratory Exercises	39	
	Home study	186	
	Course total (25 hours per one ECT)	225	
STUDENT PERFORMANCE EVALUATION	Preparation and Presentation of Laboratory Exercises (at the end of the semester) Grading scale: 1-10. Passing grade: 5 Grading: 3 correspond to ECTS grade F. Grade 4 corresponds to ECTS grade FX. Passing grades correspond to ECTS grades as follows: 5=E, 6=D, 7=C, 8=B, 9=A		
Attached bibliography			
<ul style="list-style-type: none"> - Chalmers N, Parker P (1989) The OU Project Guide: Fieldwork and Statistics for Ecological Projects. Field Studies Council, Open University. - Dytham C (2003) Choosing and Using Statistics. Blackwell Science. - Fowel J, Cohen L, Jarvis P (1998) Practical Statistics for Field Biology. John Wiley & Sons. - Gotelli NJ, Ellison AM (2004) A Primer of Ecological Statistics. Sinauer Associates. - Krebs CJ (1999) Ecological Methodology. Addison-Welsey. - Quinn GP, Keough MJ (2002) Experimental Design and Data Analysis for Biologists. Cambridge University Press. - Ruxton CD, Colegrave N (2003) Experimental Design for the Life Sciences. Oxford University Press. - Zar JH (1998) Biostatistical Analysis. Prentice Hall. 			