

Title: Design of Nature Reserve Systems			
Code number:	122E	Type:	Optional Compulsory
Level:	Undergraduate		
Year:	3	Semester:	F
ECTS Units:	4	Teaching Units:	3
Lecturer(s):	P.G. Dimitrakopoulos		
Content outline and weekly schedule:	<ol style="list-style-type: none"> 1. Biodiversity, rarity, endemism, threatened species 2. Threats to biodiversity: Habitat destruction and degradation, overexploitation, exotic species and diseases. 3. Habitat fragmentation 4. Island biogeography 5. Protected areas and classification systems 6. Establishing Priorities in protected areas selection (biodiversity hotspots, reserve selection algorithms, gap analysis) 7. Application of Geographical Information Systems in establishing protected areas 8. Designing protected areas (reserve size, SLOSS, effective preservation of species) 9. Landscape ecology and park design (linking reserves with habitat corridors, ecological networks, outside of protected areas) 10. Ex-situ conservation strategies 11. International and National Law in conservation issues - Protected areas in Greece 12. Managing protected areas (the role of monitoring in species and habitat conservation). 13. The role of social and economic factors in protected areas policies 		
Learning Outcomes:	<ol style="list-style-type: none"> 1. Understanding of basic concepts of conservation biology and biogeography. 2. Understanding of key components that must be taken into account when designing protected areas. 3. Knowledge and handling methodologies to determine priority areas for biodiversity conservation. 		
Prerequisites:	-		
Recommended Reading:	Lecture notes:	P. Dimitrakopoulos. Design of nature reserve systems. 112 pages (in Greek).	
	Basic textbooks:	R. Primack, Γ. Διαμαντόπουλος, Μ. Αριανούτσου, Δ. Δανιηλίδης, Σ. Βαλάκος, Π. Παφίλης, Ι.Δ. Παντής, (2007), Διατήρηση και προστασία της βιοποικιλότητας, ΒΙΒΛΙΟΠΟΛΙΣ, ΑΘΗΝΑ	
	Additional References:	<ul style="list-style-type: none"> • Primack, R.B. 2002. Essentials of Conservation Biology. Sinauer Associates, Inc., Sunderland, Massachusetts. • Hunter, M.L. 2002. Fundamentals of Conservation Biology. Blackwell Science, Inc. • Meffe, G.K. and Carroll, C.R. 2006. Principles of Conservation Biology. Sinauer, Sunderland, 	

		Massachusetts.
	Internet links:	www.ypeka.gr www.iucn.org www.unep-wcmc.org
Learning Activities and Teaching Methods:	Lectures (hours/week):	3
	Practicals-Tutorials (hours/week):	0
	Other learning activities:	written essay
Assessment/Grading:	written essay (30%), written examination at the end of the semester (70%)	
Instruction Language:	Greek	
Mode of delivery:	face-to-face	