

Semester	2		
Course code	ZOOOL 12512		
Course Name:	Evolutionary Biology and Zoogeography		
Credit Value:	2		
Core/Optional	Core		
Pre requisites	G.C.E. (A/L) Biology		
Co-requisites	None		
Hourly Breakdown	Theory	Practical	Independent Learning
	26	08	66
Course Aim/Intended Learning Outcomes:			
After completion of the course unit, the student will be able to;			
<ul style="list-style-type: none"> ➤ explain evolutionary concepts, evolutionary patterns and human evolution, and ➤ describe concepts in biogeography and regional distribution of biota, ➤ describe the effect of climate change on biogeography, and ➤ explain the adaptive radiation of selected organs in vertebrates 			
Course Content:			
History of evolutionary thought and biological evolution, Population genetics and genetic basis of evolution, Variation, Mechanism of evolution, Natural selection, Reproductive isolation mechanisms and speciation, Adaptive radiations, Theories of origin of life on earth, Diversification of prehistoric life, Plant and animal invasion into land, Human evolution, Extinction of life forms including mass extinctions.			
Brief biogeographic history of the earth, Continental drift and plate tectonics, Biogeographic regions of the world with associated fauna and flora, Dispersal of species and species distribution in the world, Theory of Island Biogeography, Regional distribution of biota with special reference to Sri Lanka and endemism, Climate change and its effects on biogeography.			
Practical sessions on evolutionary biology.			
Teaching /Learning Methods: A combination of lectures, practical sessions, computer based learning, self-studies, assignments and small group discussions.			
Assessment Strategy: Continuous assessment and end of course examination.			
Continuous Assessment 10%	Final Assessment 90%		
Details: Online quizzes, assignments 10%	Theory (%) 90%	Practical (%) NA	Other (%) (specify) NA
Recommended reading:			
<ol style="list-style-type: none"> 1. MacDonald, G. M. (2003). Biogeography-space, time and life. John Wiley and Sons. 2. Raven, P. H. & G. B. Johnson (2010). Biology. 8th Edition. Tata McGraw-Hill Edition. 3. Reece, J. B., L. A. Urry, M. L. Cain, S. A. Wasserman, P. V. Minorsky and R. B. Jackson (2011). Campbell Biology, Global Edition. 9th Edition. Pearson Education Inc. 			