

<b>Semester:</b>	02		
<b>Course Code:</b>	ZOOL 12711		
<b>Course Name:</b>	Animal Diversity Laboratory		
<b>Credit Value:</b>	01		
<b>Status:</b>	Compulsory		
<b>Pre-requisite:</b>	BIOL 11552		
<b>Co-requisite:</b>	ZOOL 12703		
<b>Hourly Breakdown:</b>	Theory	Practical	Independent Learning
	-	45	05
<b>Intended Learning Outcomes:</b>			
After completion of this course unit, the student will be able to:			
<ol style="list-style-type: none"> <li>1. use both compound and stereo microscopes effectively for zoological studies,</li> <li>2. classify animals into phyla and other relevant taxa using major structural features,</li> <li>3. use taxonomic keys and field guides to identify and classify animals,</li> <li>4. recognize adaptive radiation of selected animal groups based on structural features, and</li> <li>5. appreciate the wide diversity in animals and their adaptations to different modes of life.</li> </ol>			
<b>Course Content:</b>			
Effective use of compound and stereo microscopes for animal diversity studies. Observation of major morphological features of the live or preserved specimens, photographs or online resources of selected members in the following phyla, subphyla, classes and orders using taxonomic keys and field guides: Porifera, Cnidaria, Ctenophora, Platyhelminthes, Nematoda, Rotifera, Annelida, Onychophora, Tardigrada, Arthropoda, Mollusca, Phoronida, Brachiopoda, Ectoprocta/Bryozoa and Echinodermata. Non-vertebrate chordate phylum Hemichordata, and subphyla, Urochordata and Cephalochordata, Diversity, evolutionary trends and adaptive radiation of subphylum Vertebrata; most recent classification of fishes, amphibians, reptiles, birds and mammals.			
Field studies on invertebrate and vertebrate diversity. Construction of dichotomous keys for selected invertebrates and vertebrates.			
<b>Teaching /Learning Methods:</b>			
A combination of laboratory sessions, field studies, videos and online resources			
<b>Assessment Strategy:</b>			
Continuous assessment and end of semester examination. Percentage given for each sub-component indicates the percent contribution to the final marks.			
Continuous Assessment 40 %		Final Assessment 60 %	
Details:		Theory	Practical
Laboratory reports	10 %	-	60%
Assignments	10 %		
Field report	20 %		
			Other
			-

**Recommended Readings:**

1. Hickman, C., L. Roberts, A. Larson & H. I'Anson (2016). Laboratory Studies in Integrated Principles of Zoology 17<sup>th</sup> Edition. Mc Graw Hill Education (UK)
2. Hickman, C., & L. Kats (2018). Animal Diversity, 8<sup>th</sup> Edition, Mc Graw Hill Education (UK)
3. Laboratory Manual for ZOOL 12531: Animal Diversity and Sri Lankan Fauna Laboratory manual, Department of Zoology, University of Kelaniya.
4. Dutta, S.K. & K. Mamamendra-Arachichi (1996). The Amphibian Fauna of Sri Lanka. Wild life Heritage Trust of Sri Lanka, Colombo.
5. Henry, G. M. (1978). A Guide to the birds of Ceylon. K.V.G. De Silva & Sons, Kandy.
6. Phillips, W. W. A. (1981). The Manual of Mammals of Sri Lanka. Volumes I-IV. Wildlife. and Nature Protection Society of Sri Lanka, Colombo.
7. Raven, P. H. & G. B. Johnson (2010). Biology. 8th Edition. Tata McGraw-Hill Edition.