Semester:	02				
Course Code:	ZOOL 12733				
Course Name:	Faunal Diversity and Sri Lankan Fauna				
Credit Value:	3				
Status:	Compulsory				
Pre-requisite:	GCE (A/L) Biology				
Co-requisite:	-				
Hourly Breakdown:	Theory	Practical	Independent Learning		
	30	45	75		

## **Intended Learning Outcomes:**

After completion of this course unit, the student will be able to;

- 1. explain the basic principles of taxonomy and phylogenetics of Kingdom Animalia,
- 2. describe characteristic features of animal taxa and their diversity,
- 3. describe the adaptive radiations of vertebrates, and
- 4. identify fauna using morphological characteristics and relevant guides with special reference to Sri Lankan fauna.

## **Course Content:**

Introduction to animal taxonomy and phylogenetics. Phylogenetic tree of animals. Diversity of sponges, cnidarians and ctenophores (comb jellies), flatworms, roundworms, segmented worms, arthropods, mollusks and echinoderms with special reference to Sri Lankan fauna. Non- vertebrate chordates. Vertebrate chordates: Introduction to Subphylum Vertebrata, Jawless and jawed fishes, Diversity of amphibians, birds and mammals with special reference to Sri Lankan fauna. Adaptive radiation of mammals.

Practical sessions on, Phylum Porifera, Phylum Cnidaria, Phylum Ctenophora, Phylum Platyhelminthes, Phylum Nematoda, Phylum Annelida, Phylum Arthropoda, Phylum Mollusca and Phylum Echinodermata, Minor Phyla, Subphylum Hemichordata, Phylum Chordata: Subphylum Urochordata, Subphylum Cephalochordata and Subphylum Vertebrata with special reference to Sri Lankan fauna. Field study to observe invertebrate diversity and vertebrate diversity.

## **Teaching /Learning Methods:**

A combination of lectures, laboratory and field practical sessions, computer based learning, self-studies, field based assignments and small group discussions.

**Assessment Strategy:** Continuous assessment and end of semester examination. Percentage given for each sub component indicates the percent contribution to the final marks.

0				
Continuous Assessment 30 %		Final Assessment 70 %		
Details: Tutorial Laboratory reports Field report	10 10 10	Theory 45	Practical 25	Other -

## **Recommended Readings:**

 Hickman, C., L. Roberts, S. Keen & A. Larson Jr. (2021). Animal Diversity, 9<sup>th</sup> Edition, McGraw-Hill.

- 2. Raven, P. H. & G. B. Johnson (2010). Biology. 8th Edition. Tata McGraw-Hill Edition.
- Reece, J. B., L. A. Urry, M. L. Cain, S. A. Wasserman, P. V. Minorsky & R. B. Jackson (2011). Biology – Campbell. Global Edition. 9th Edition. Pearson Education Inc.
- 4. Manamendra-Arachchi, K., Pethiyagoda, R., 2006 Sri Lankawe Ubhayajeeveen (Amphibians of Sri Lanka). WHT Publications (Pvt) Ltd, Colombo, Sri Lanka.99-101pp.
- De Silva, A and Ukuwela, K. 2020. The Naturalist's Guide to Reptiles of Sri Lanka (2<sup>nd</sup> Edition). John Beaufoy Publishing.
- 6. Pethiyagoda, R. (1991). Freshwater Fishes of Sri Lanka Wildlife Heritage Trust, Colombo.
- 7. Yapa, A., & Ratnavira, G. (2013). *Mammals of Sri Lanka*, Field Ornithology Group of Sri Lanka.
- 8. Selected simple taxonomic keys and field guides for species identification.