

<b>Semester:</b>	08		
<b>Course Code:</b>	ZOOL 42862		
<b>Course Name:</b>	Herpetology		
<b>Credit Value:</b>	02		
<b>Status:</b>	Optional		
<b>Pre-requisite:</b>	ZOOL 12703		
<b>Co-requisite:</b>	None		
<b>Hourly Breakdown:</b>	Theory	Practical	Independent Learning
	22	24	54

**Intended Learning Outcomes:**

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

1. discuss ecological, economical and scientific importance of herpetofauna,
2. explain evolutionary history, global distribution and diversity of herpetofauna,
3. describe biology and behavior of herpetofauna,
4. explain types and properties of snake venom,
5. discuss the threats and needs for conservation of herpetofauna, and
6. demonstrate competencies in sampling, handling and identifying herpetofauna of Sri Lanka.

**Course Content:**

Introduction to herpetology. Ecological, economical and scientific importance of herpetofauna. Biogeography of herpetofauna. General anatomy of amphibians and reptiles. Evolution of amphibians and reptiles. Biology of herpetofauna: reproduction and reproductive modes, water balance, gas exchange, thermoregulation. Behaviour of herpetofauna: spacing, movements, orientation, communication, social interactions, foraging and diets, defense and escape. Amphibians and reptiles in Sri Lanka, venomous and non-venomous snakes, snake venom. Threats, need for conservation and future of herpetofauna in Sri Lanka.

Laboratory sessions on systematics of amphibians and reptiles, field techniques in sampling and handling of amphibians and reptiles, herpetological studies including marking and individual recognition techniques.

**Teaching /Learning Methods:**

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

Continuous Assessment 40 %		Final Assessment 60 %		
Details:		Theory	Practical	Other
Presentations	10%	60 %	-	-
Assignments	10%			
Field practical	20%			

**Recommended Readings:**

1. Vitt, L.J. & J. P. Caldwell (2013). Herpetology; An Introductory Biology of Amphibians and Reptiles. 4th Ed. Elsevier
2. Pough, F.H., R. M. Andrews, M.L. Crump, A.H. Savitzky, K. D. Wells & M.C. Brandley (2015). Herpetology, 4<sup>th</sup> edition, Oxford University press
3. Kularatne, S.A.M. (2013) Snakes, Snakebite and Envenoming in Sri Lanka
4. Dutta, S.K. & K. Mamamendra-Arachichi (1996). The Amphibian Fauna of Sri Lanka. Wild life Heritage Trust of Sri Lanka, Colombo.
5. Recently published scholarly articles on herpetofauna in Sri Lanka