Semester	**6**		
Course code	**ZOOL 32563**		
Course Name:	**Conservation Biology and Wildlife Management**		
Credit Value:	3		
Core/Optional	**Optional for the BSc Degree programme.** **Compulsory for the BSc (Honours) Degree programme in Zoology.**		
Pre requisites	ZOOL 12523 & ZOOL 22543		
Co-requisites	**None**		
Hourly Breakdown	Theory	Practical	Independent Learning
	40	20	90

Course Aim/Intended Learning Outcomes:

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

- explain the principles of conservation biology and aims of wildlife management,
- describe the issues associated with the biodiversity loss,
- prioritize conservation efforts using qualitative and quantitative techniques,
- evaluate habitats and recommend strategies for habitat management for target wildlife,
- suggest strategies for management of wildlife using population data and field experiments, and
- demonstrate skills in application of specific techniques used in wildlife conservation and management.

Course Content:

Principles of Conservation Biology, Change of biological diversity with time, Species extinction and formation, IUCN categories for the conservation status of taxa, Threats to biological diversity, Habitat destruction, Habitat fragmentation, Over harvesting, Invasive species, Climate change, Problems of small populations, Measuring and comparing biodiversity, Abundance time series, Risk prediction, Genetic principles and rules in Conservation Biology, Conservation at the species and population level, Conservation planning and priority selection, Management of endangered species, Conservation of plant animal mutualism, Conservation of pollinators, Conservation in human modified landscapes.

Introduction to wildlife Management, Aims of wildlife management, Wildlife management in Sri Lanka, Protected areas, Habitat management strategies, Wildlife and water, predators and predation, Hunting and trapping, Human-elephant conflict, elephant conservation, Management of crocodiles and marine turtles. Population analysis, Life tables, Patterns of population growth, Wildlife diseases, Wildlife surveys including animal capture/marking, surveys, aging and sexing and experiments, The role of society in conservation, *In-situ* and *ex-situ* conservation. International trade of wildlife and CITES, Ecotourism, Legal aspects, Flora and fauna protection ordinance in Sri Lanka and international efforts of wildlife management.

Two field studies at nature reserves.

Teaching /Learning Methods: A combination of lectures, laboratory and field studies, assignments, self-studies, computer based learning, and small group discussions.

Assessment Strategy: Continuous assessment and end of course examination.

Continuous Assessment 30%	Final Assessment 70%		
Details: Online/in-class Tutorial 1 or 2 10% Field report 10% Group Presentation 10%	Theory (%) 70%	Practical (%) NA	Other (%)(specify) NA

Recommended reading:

1. Bolen, E. G. & W. Robinson (2002). Wildlife Ecology and Management, 5th edition, Benjamin Cummings, USA.
2. Flora and fauna protection ordinance in Sri Lanka.
3. Navjot, S. S. & E. R. Paul (2011). Conservation biology for all, Oxford University Press, New York.
4. Primack, R. B. (2010). Essentials of conservation biology, 5th edition. Sinauer Associates, Inc. Publishers Sunderland, Massachusetts U.S.A.
5. Silvy, N. J. (2002). The Wildlife Techniques Manual: Volume 1: Research. Volume 2: Management 2-vol. set. John Hopkins University Press.
6. Sinclair, A. R. E., J. M. Fryxell & G. Caughley (2005). Wildlife Ecology, Conservation and Management, 2nd Edition, Wiley-Blackwell.