Semester:	08		
Course Code:	ZOOL 42892		
Course Name:	Apiculture		
Credit Value:	02		
Status:	Optional		
Pre-requisites:	ZOOL 41703 & ZOOL 41711		
Co-requisites:	None		
Hourly Breakdown:	Theory	Practical	Independent Learning
	22	24	54

Intended Learning Outcomes:

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

1. describe bee biology and behavior,
2. explain the procedure of practicing traditional beekeeping and the new flow hive,
3. discuss the threats and treat common bee pests and diseases
4. demonstrate skills to identify the life stages of bees and components of a bee hive, and
5. manage bee colonies for producing honey and other products.

Course Content:

Introduction to apiculture. Species of honeybees in Sri Lanka. General features of *Apis cerana*. Division of labour in a honeybee colony. Behaviour of honeybees: memory, learning, changing hive position, and communication. Honeybee flora. Adaptations to live on flowers. Nest architecture and the domesticated bee hive.

Management of honeybee colonies: growth of a bee population, seasonal management, increasing/decreasing hive space, inspections, checking food stores, feeding, nectar (honey) flow, ventilation/moisture control, re-queening, monitoring pests and pest prevention/control, harvesting honey surplus, swarming and absconding, removal of honey from combs, equipment use in apiculture. Colony collapse disorder. Products of the hive; honey, wax, pollen, propolis, royal jelly, apitherapy nectar, composition and quality of honey.

Practical sessions on general morphology of different casts of honeybees, equipment used in beekeeping, and field studies to research and beekeeping centres.

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 assessments and end of semester examinations. Percentage given for each sub-component indicates the percent contribution to the final marks.

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

Recommended Readings:

1. Punchihewa, R.W.K. (1994). Beekeeping for honey production in Sri Lanka. Management of Asiatic hive honeybee *Apis cerana* in its natural tropical monsoonal environment. Sri Lanka department of agriculture.
2. Graham, J. M. (1992). The hive and the honey bee. Dadant and Sons, Hamilton, IIIinois.
3. Mishra, R.C. (1995) Honey bees and their management in India. ICAR Publication, New Delhi.
4. Singh, S. (1971) Beekeeping in India, ICAR publication.
5. Recently published scholarly articles on beekeeping.