

Semester	5		
Course code	ZOO 31523		
Course Name:	Entomology and Insect Pest Management		
Credit Value:	3		
Core/Optional	Optional		
Pre requisites	ZOO 12523		
Co-requisites	None		
Hourly Breakdown	Theory	Practical	Independent Learning
	30	30	90
Course Aim/Intended Learning Outcomes:			
After completion of this course unit, the student will be able to;			
<ul style="list-style-type: none"> ➤ identify common insects and acarines to the lowest taxonomic group possible using keys, ➤ identify major insect and acarine pests of agriculture in Sri Lanka, ➤ describe damages and damage symptoms caused by, ➤ describe the life histories of common household and agriculturally important insect and acarine pests in Sri Lanka, ➤ explain procedures and techniques used in insect and acarine pest management, ➤ recommend suitable control measures for the management of insect and acarine pests in agriculture, and ➤ demonstrate practical skills in basic entomological techniques. 			
Course Content:			
Introduction to insect morphology, major morphological features of the order Acarina and insect orders of Thysanura, Orthoptera, Isoptera, Blattodea, Hemiptera, Thysanoptera, Pthiraptera, Coleoptera, Neuroptera, Hymenoptera, Lepidoptera, Siphonaptera, Strepsiptera, and Diptera; Causes of insect pest outbreaks, Life history and habitats/ microhabitats and management of insect and acarine pests of rice, coconut, tea, sugarcane and selected fruit and vegetable crops in Sri Lanka. Life history and control of common insect pests of selected stored products. Concepts in insect pest management; General Equilibrium Level, Economic Threshold Level and Economic injury Level, Chemical, cultural and biological control of insect pests, Host plant resistance to insects, Integrated pest management, Life history and management of medically important vectors and household insect pests of Sri Lanka.			
Practical sessions on identification of insect pests to the lowest taxonomic level, Life stages and damage symptoms of major insect and acarine pests of rice, coconut, tea, sugarcane, selected vegetables, fruits and stored products; Life history of medically important insect vectors and household insect pests; Insecticides and application equipment; Biological control programs of insect pests in Sri Lanka, Entomological techniques including insect rearing methods, and insect collection and sampling techniques.			
Teaching /Learning Methods: A combination of lectures, laboratory and field studies, assignments, self-studies, computer based learning, and small group discussions.			
Assessment Strategy: In-course assessment, end of semester examination.			
Continuous Assessment 40%		Final Assessment 60%	
Details: Online and/or in-class assignment/quizzes 40%		Theory (%) 40%	Practical (%) 20% Other (%) (specify) NA
Recommended reading:			
<ol style="list-style-type: none"> 1. Gullen, P.J. & P.S. Cranston (2010). The Insects, an outline of Entomology, 10th Edition, Blackwell Science. 2. Mullen, G. & L. Durden (2009). Medical Entomology, Academic Press. 3. Pedigo L.P. & M. Rice (2006). Entomology and Pest Management Pearson, NJ, USA. 4. Triplehorn, C. & N. F. Johnson (2006). Borror and Delong's Introduction to the Study of Insects, 7th Edition, Thomson Publishers, USA. 			