

Semester	8		
Course code	ZOOL 42642		
Course Name:	Medical and Veterinary Entomology		
Credit Value:	2		
Core/Optional	Core		
Pre requisites	ZOOL 41524		
Co-requisites	None		
Hourly Breakdown	Theory	Practical	Independent Learning
	20	30	50
Course Aim/Intended Learning Outcomes:			
After completion of the course unit, the student will be able to;			
<ul style="list-style-type: none"> ➤ identify insects and acarines that are of importance to man and domestic animals and describe their life histories, ➤ describe vector-host-pathogen relationship in vector borne diseases, ➤ recommend strategies to control insect and acarines that are of importance to man and domestic animals, ➤ discuss vector surveillance techniques, ➤ demonstrate practical skills to identify major vector mosquito species using key characteristics and, ➤ demonstrate practical skills to identify parasitic insects, mites and tick species of animals using key characteristics. 			
Course Content:			
Introduction to Medical Entomology; arthropods as vectors of disease agents and as pests of hygiene, including mosquitoes, flies, fleas, lice, bugs, cockroaches, ticks and mites; life histories of blood sucking insects and mites, including mosquitoes, sandflies, lice, sand fleas, itch mite and chigger mite that serve as vectors of several diseases in humans including malaria, filariasis, Japanese encephalitis, dengue, chickengunya, relapsing fever, typhus fever, leishmaniasis, plague and scrub typhus, epidemiology and methodologies adopted in prevention and management of each vector borne disease; climate change and vector-borne diseases;			
Introduction to Veterinary Entomology; identification, classification and life history pattern and the injury caused by fleas, biting lice and sucking lice of domestic animals and poultry; identification, classification and life history pattern and the injury caused by blowflies and flesh flies causing myiasis in animals; identification, life histories and injury caused by mite species causing sarcoptic mange and tick species in animals.			
Practical sessions on collection and sampling techniques of medically important insects; identification of major vector mosquito species; Identification of flea species and tick species of animals using keys.			
Teaching /Learning Methods: A combination of lectures, laboratory and field sessions, assignments, self-studies, computer assisted learning, and small group discussions.			
Assessment Strategy: Continuous assessment and end of course examination.			
Continuous Assessment	40%	Final Assessment	60%
Details:		Theory (%)	Practical (%)
Online and/or in-class assignment/quizzes	40%	40%	20%
Recommended reading:			
1. Eldridge, B.F. & J. Edman (2003). Medical Entomology: A Textbook on Public Health and Veterinary Problems Caused by Arthropods, Kluwer academic publishers.			
2. Lehane, M. (2005). The Biology of Blood Sucking Insects. 2 nd Edition, Cambridge University Press.			
3. Mullen, G.R. & L. A. Durden (2009). Medical and Veterinary Entomology, Second Edition, Academic Press.			
4. Service, M. (2012) Medical Entomology for students, 5 th Edition, Cambridge University Press.			