

<b>Semester</b>	<b>7</b>		
<b>Course code</b>	<b>ZOOL 41622</b>		
<b>Course Name:</b>	<b>Nematode Pest Management</b>		
<b>Credit Value:</b>	2		
<b>Core/Optional</b>	Optional		
<b>Pre requisites</b>	<b>ZOOL 12523</b>		
<b>Co-requisites</b>	<b>None</b>		
<b>Hourly Breakdown</b>	Theory	Practical	Independent Learning
	22	24	54
<b>Course Aim/Intended Learning Outcomes:</b>			
After completion of the course unit, the student will be able to;			
<ul style="list-style-type: none"> <li>➤ identify plant parasitic nematodes as pests of agriculture and horticulture crops.</li> <li>➤ describe the types of injury and the damage symptoms caused by plant parasitic nematodes with special reference to economically important crops in Sri Lanka,</li> <li>➤ determine the threshold injury level and the crop loss due to nematode infestation,</li> <li>➤ apply/recommend and suggest suitable management practices and preventive measures against plant parasitic nematode infestations in a given crop,</li> <li>➤ discuss quarantine regulations implemented in Sri Lanka against plant parasitic nematodes,</li> <li>➤ demonstrate practical skills in morphological identification of plant parasitic nematodes</li> <li>➤ quantify nematode population in field using the appropriate sampling technique.</li> </ul>			
<b>Course Content:</b>			
Introduction to nematodes and general characteristics of plant parasitic nematodes (2) nematode interactions with the host plant (1). Root-knot nematodes, lesion and burrowing nematodes, cyst nematodes (4). Ectoparasitic nematodes as plant virus vectors (1). Injury caused by plant parasitic nematodes to host plant and their symptoms (1). The economic threshold level of nematode infestation and calculation of crop loss (2). Nematode parasites of tea, rice, fruit and vegetable crops and other economically important crops in Sri Lanka and their management (5). Globally reported nematode parasites as regulated pests of Sri Lanka and quarantine practices adopted against them (1). Soil/plant sampling and extraction for accurate identification and population studies of parasitic nematodes (3). Practical sessions on identification of root-knot, lesion, burrowing and cyst nematodes. Handling plant parasitic nematodes, preservation and slide mounting. Soil survey and extraction of nematodes; Visit to the National Plant Quarantine Services Centre			
<b>Teaching /Learning Methods:</b> A combination of lectures, laboratory and field sessions, assignments, self-studies, computer assisted learning, and small group discussions.			
<b>Assessment Strategy:</b> Continuous assessment and end of course examination.			
Continuous Assessment 30%		Final Assessment 70%	
Details: Online assignments 10% Presentation 10% Laboratory course work 10%		Theory (%) 50%	Practical (%) 20% Other %(specify) NA
<b>Recommended reading:</b>			
<ol style="list-style-type: none"> <li>1. Laboratory Manual for nematology (2014). Department of Zoology, University of Kelaniya.</li> <li>2. Luc, M., R. A. Sikora &amp; J. Bridge (2004). Plant Parasitic Nematodes in Subtropical and Tropical Agriculture, CAB International, Wallingford, UK.</li> <li>3. Nickle, W.R. (1991). Manual of Agricultural Nematology, Marcel Dekker Inc., New York.</li> </ol>			