

AGI3553 Plant Protection

<b>Level</b>	3
<b>Course Code</b>	AGI3553
<b>Course Title</b>	Plant Protection
<b>Credit value</b>	5
<b>Core/Optional</b>	Core (Agriculture)
<b>Course Aim/s</b>	To enable the student to reach current understanding and practical skills in the field of plant protection, which is relevant to biosecurity, food security and agriculture.
<b>Course Learning Outcomes (CLO):</b>	<p>At the completion of this course student will be able to</p> <p>CLO1: Scientifically classify the insects[PO1] [PO2] [PO3] [PO4]</p> <p>CLO2: Explain insect physiology and morphological characterizes [PO1] [PO2] [PO3] [PO4]</p> <p>CLO3: Discuss the relationships between insects and crops [PO1] [PO2] [PO3] [PO4][ PO5]</p> <p>CLO4: Explain the methods of insect pest controlling [PO1] [PO2] [PO3] [PO4] [PO5] [PO6] [PO7] [PO8] [PO9] [PO10] [PO11] [PO12]</p> <p>CLO5: Describe the stored grain pests and their management [PO1] [PO2] [PO3] [PO4] [PO5] [PO6] [PO7] [PO8] [PO9] [PO10] [PO11] [PO12]</p> <p>CLO6: Identify the nature of pathogen attacks to the crops. [PO1] [PO2] [PO3] [PO4] [PO5]</p> <p>CLO7: Discuss the nature of pathogen attacks to the plants [PO1] [PO2] [PO3] [PO4] [PO5] [PO6] [PO7] [PO8] [PO9] [PO10] [PO11] [PO12]</p> <p>CLO8: Explain the nature of weed crop interaction [PO1] [PO2] [PO3] [PO4]</p> <p>CLO9: Explain the Integrated pest management combining the ecological aspects of pests [PO1] [PO2] [PO3] [PO4] [PO5] [PO6] [PO7] [PO8] [PO9] [PO10] [PO11] [PO12]</p>
<b>Content (Main topics, sub topics)</b>	<p><b>Outline syllabus:</b></p> <p>Unit 1: Pest management</p> <p style="padding-left: 20px;">Session 1: Principles of Entomology</p> <p style="padding-left: 20px;">Session 2: Insect systematics</p> <p style="padding-left: 20px;">Session 3: Insect physiology and Morphology</p> <p style="padding-left: 20px;">Session 4: Agriculturally important insect orders</p> <p style="padding-left: 20px;">Session 5: Insect pest controlling</p> <p style="padding-left: 20px;">Session 6: Stored Grain Pests and Their Management</p> <p style="padding-left: 20px;">Session 7: Agriculturally beneficial insects</p> <p>Unit 2: Disease management</p> <p style="padding-left: 20px;">Session 8: Principles in plant pathology</p> <p style="padding-left: 20px;">Session 9: Parasitism and disease development</p> <p style="padding-left: 20px;">Session 10: Effects of pathogens on plant physiological functions</p> <p style="padding-left: 20px;">Session 11: Genetics of plant diseases</p> <p style="padding-left: 20px;">Session 12: How pathogens attack plants</p> <p style="padding-left: 20px;">Session 13: How plant defend themselves against pathogens</p> <p style="padding-left: 20px;">Session 14: Effects of Environment on plant disease development</p> <p style="padding-left: 20px;">Session 15: Plant disease epidemiology</p> <p style="padding-left: 20px;">Session 16: Plant disease control</p> <p style="padding-left: 20px;">Session 17: Plant diseases caused by fungi</p> <p style="padding-left: 20px;">Session 18: Plant disease caused by bacteria</p>

	<p>Session 19: Plant diseases caused by higher plants  Session 20: Plant disease caused by viruses  Session 21: Plant disease caused by nematodes  Session 22: Plant diseases caused by protozoa</p> <p>Unit 3: Weed management  Session 23: Introduction to General Weeds in Sri Lanka  Session 24: Weed biology and ecology  Session 25: Crop weed interaction  Session 26: Methods of weed control</p> <p>Unit 4: Insect Ecology and Integrated Pest Management  Session 27: Insect Ecology  Session 28: Pest out break  Session 29: Introduction to Integrated Pest disease and weed Management  Session 30: Studying the pesticides</p> <p><b>Laboratory Work:Yes</b></p> <ol style="list-style-type: none"> <li>1. Identifying the morphological features of an insect</li> <li>2. Identifying characteristics of different agriculturally insect orders</li> <li>3. Identifying plant pathogens</li> <li>4. Identifying plant disease symptoms.</li> <li>5. Differentiate pesticides according to the formula, type of pesticide and mode of action.</li> <li>6. Identifying equipment related to the pesticide application.</li> <li>7. Study weed biology</li> </ol>
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