

AGI4362 Environmental Agriculture

<b>Level</b>	4
<b>Course Code</b>	AGI4362
<b>Course Title</b>	Environmental Agriculture
<b>Credit value</b>	3
<b>Core/Optional</b>	Core (Agriculture)
<b>Course Aim/s</b>	To develop basic knowledge on the impact of agriculture on environment and their applications in sustainable agriculture
<b>Course Learning Outcomes (CLO):</b>	<p>CLO1: Describe the environmental concerns including interactions between microorganisms and environment PO1, PO2, PO3, PO12</p> <p>CLO2: Analyze the impact of environment pollution on agriculture and environment pollution due to agriculture – PO4, PO5, PO7, PO12</p> <p>CLO3: Formulate measures to ensure environment friendly agriculture – PO7, PO8, PO12</p>
<b>Content (Main topics, sub topics)</b>	<p><b>Outline Syllabus:</b></p> <p>Unit 1 Environmental concerns in Agriculture</p> <p style="padding-left: 20px;">Session 1 An Introduction to Environmental Microbiology</p> <p style="padding-left: 20px;">Session 2 Biogeochemical Cycles in Ecosystem</p> <p style="padding-left: 20px;">Session 3 Microbes in Atmosphere, Lithosphere and Hydrosphere</p> <p style="padding-left: 20px;">Session 4 Microbial Interactions</p> <p style="padding-left: 20px;">Session 5 Biodegradation of Pesticides</p> <p style="padding-left: 20px;">Session 6 Climate Change and Environment</p> <p style="padding-left: 20px;">Session 7 Impact Agriculture and forestry on Climate Change</p> <p style="padding-left: 20px;">Session 8 Impact of Climate Change on Agriculture in Sri Lanka</p> <p>Unit 2 Environmental Pollution and Agriculture</p> <p style="padding-left: 20px;">Session 9 Introduction to Air Water and Soil Pollution</p> <p style="padding-left: 20px;">Session 10 Water Pollution</p> <p style="padding-left: 20px;">Session 11 Eutrophication</p> <p style="padding-left: 20px;">Session 12 Environmental Toxicology</p> <p style="padding-left: 20px;">Session 13 Pollution of Wetland Ecosystems</p> <p style="padding-left: 20px;">Session 14 Farm Waste Management and Reutilizations</p> <p style="padding-left: 20px;">Session 15 Wetland Management : Sustainable wetland, legislation and Policy Framework in Wetland Management in Sri Lanka</p> <p>Unit 3 Environmental Friendly Agriculture</p> <p style="padding-left: 20px;">Session 16 Principles of Sustainable Agriculture</p> <p style="padding-left: 20px;">Session 17 Environmental Indicators for Agriculture</p> <p style="padding-left: 20px;">Session 18 Environmental Impact Assessment</p> <p style="padding-left: 20px;">Session 19 Organic farming</p> <p style="padding-left: 20px;">Session 20 Dry Land Farming</p> <p style="padding-left: 20px;">Session 21 Commercial Greenhouse Production</p> <p><b>Laboratory Work: Yes</b></p>

