

AGX6490 Soil and water Conservation

Level	6
Course Code	AGX6490
Course Title	Soil and water Conservation
Credit value	4
Core/Optional	Core
Course Aim/s	To provide knowledge on principles of soil and water conservation and its applications in sustainable agricultural production.
Course Learning Outcomes (CLO):	At the completion of this course student will be able to CO1: Describe the types of erosion in Sri Lanka [PLO1][PLO3][PLO4] [PLO5] [PLO12] CO2: Explain the mechanics of erosion, erosivity and erodibility[PLO1] [PLO5][PLO6] CO3: Explain the importance of soil and water conservation and management[PLO1][PLO5] [PLO7][PLO11][PLO12] CO4: Describe the importance of rainwater harvesting[PLO1][PLO5] [PLO11][PLO12] CO5: Evaluate the soil and water conservation policies and management in Sri Lanka[PLO1][PLO5][PLO8][PLO9] [PLO11][PLO12]
Content (Main topics, sub topics)	<p>Outline Syllabus:</p> <p>Unit 1: Soil Erosion</p> <ul style="list-style-type: none"> Session 1 : Man and erosion Session 2 : Type of erosion Session 3 : Wind erosion Session 4 : Mechanics erosion Session 5 : Erosivity Session 6 : Erodibility Session 7 : Prediction of Soil Session 8 : Soil erosion problem in Sri Lanka 1 Session 9 : Soil erosion problem in Sri Lanka 11 Session 10: Sedimentation problem in Sri Lanka <p>Unit 2: Soil and water conservation and management</p> <ul style="list-style-type: none"> Session 11 : Estimation of Peak Run off Session 12 : Types of soil erosion Channel erosion and design of channel Session 13: Vegetated waterways Session 14 : Mechanical conservation Session 15 : Biological Soil conservation1 Session 16 : Biological Soil conservation 11 Session 17 : Water conservation Session 18 : Control of gully Erosion Session 19 : Rain water Harvesting 1 Session 20: Rain water Harvesting 11 <p>Unit 3: Challenges in implementing soil and water conservation methods?</p> <ul style="list-style-type: none"> Session 21 : Soil erosion surveying Session 22 : Strategies for Soil Conservation Session 23: Socio- economic Consideration Session 24 : Soil conservation and water policies Session 25 : Causes for landslides and floods Session 26 : Economics of soil conservation Session 27 : Implementation of the conservation Agriculture <p>Laboratory work : yes</p>

	<ol style="list-style-type: none">1. Measurement of soil erosion using universal soil loss equation2. Determination of amount of sediment trap in water sample3. Quantitative analysis of phosphate in soil and water sample
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