

AGX6284 Impact of Climate Change on Water Resources

Level	6
Course Code	AGX6284
Course Title	Impact of Climate Change on Water Resources
Credit value	2
Core/Optional	Optional
Course Aim/s	To explain the effects of climate change in global and local contexts and management of water resources
Course Learning Outcomes (CLO):	<p>At the completion of this course student will be able to:</p> <p>CLO1: To identify the impact of climate change based on greenhouse gasses emission and global warming [PLO1][PLO2][PLO3]</p> <p>CLO2: To describe the mitigation and adaption measures on any consequences due to climate change[PLO4][PLO8][PLO10]</p> <p>CLO3: To integrate the water resources and river basin for the management of agricultural applications [PLO6] [PLO7]</p> <p>CLO4: To predict, adapt the future climate changes based on vulnerability assessment [PLO1][PLO3][PLO6][PLO9]</p>
Content (Main topics, sub topics)	<p>Outline Syllabus:</p> <p>Unit 1: Climate Change</p> <p style="padding-left: 20px;">Session 01: Global Climate Change</p> <p style="padding-left: 20px;">Session 02: Emission of Greenhouse Gases-Agriculture and Forestry</p> <p style="padding-left: 20px;">Session 03: Modeling of Climate Change</p> <p style="padding-left: 20px;">Session 04: Global Warming Projections</p> <p style="padding-left: 20px;">Session 05: Vulnerability Assessment of Climate Change on Water Resources</p> <p>Unit 2: Climate Change and Water Resources</p> <p style="padding-left: 20px;">Session 06: Impact, Adaptation and Vulnerability on Hydrology and Water Resources -Global Perspective</p> <p style="padding-left: 20px;">Session 07: Impacts of Climate Change on Ecosystem - Global Perspective</p> <p style="padding-left: 20px;">Session 08: Climate of Sri Lanka</p> <p style="padding-left: 20px;">Session 09: Water Resources in Sri Lanka</p> <p style="padding-left: 20px;">Session 10: Impacts of Climate Change on Water Resources - Sri Lankan Perspective</p> <p style="padding-left: 20px;">Session 11: Mitigation and Adaptation Measures for Water Resources in Sri Lanka</p> <p style="padding-left: 20px;">Session 12: Impact of Climate Change and Adaptation Measures for Agriculture in Sri Lanka</p>

Session 13: Impacts of Climate Change on Coastal Water Resources in Sri Lanka and the Adaptation

Session 14: Integrated Water Resources Management

Session 15: River Basin Management

Mini Project:

The topics can be changed depending on the climate change issues. One of the topics will be selected and given annually.

Climate change threats and solutions

Greenhouse gas emissions

Global warming and its impacts

Climate change conferences (UN conferences)

Water resources, climate change impacts and adaptation planning