# Course Outline: Agriculture & Environmental Sustainability

## Course Description

This course explores sustainable agricultural practices and their impact on the environment. Topics include soil conservation, climate-smart agriculture, organic farming, pest management, and sustainable water use. The course equips students with knowledge on eco-friendly farming techniques, biodiversity conservation, and sustainable food production systems.

## Course Objectives

- Understand the principles of sustainable agriculture.

- Apply soil conservation and water management techniques.

- Analyze the effects of climate change on farming.

- Implement organic farming and eco-friendly pest control strategies.

- Evaluate policies and regulations affecting sustainable agriculture.

## Weekly Topics

- Week 1: Introduction to Sustainable Agriculture

- Week 2: Soil and Water Conservation Techniques

- Week 3: Organic Farming and Agroecology

- Week 4: Climate Change and Agriculture

- Week 5: Pest and Disease Management

- Week 6: Agroforestry and Biodiversity Conservation

- Week 7: Policy and Economics of Sustainable Agriculture

- Week 8: Sustainable Food Production and Future Trends

## Assessment Methods

The course will be assessed through the following methods:  
- Quizzes (20%)  
- Assignments (30%)  
- Final Project (50%)

## Required Readings

1. Pretty, J. (2018). Sustainable agriculture and food. Routledge.  
2. Altieri, M. A. (2018). Agroecology: The science of sustainable agriculture. CRC Press.  
3. FAO. (2020). The state of food and agriculture. Food and Agriculture Organization.