

# SCC 605 : Economics of Climate Change

## Introduction

There is now clear scientific evidence that emissions from economic activity, particularly the burning of fossil fuels for energy, are causing changes to the Earth's climate. A sound understanding of the economics of climate change is needed in order to underpin an effective global response to this challenge. The Economics of Climate Change will be invaluable for all students of the economics and policy implications of climate change, and economists, scientists and policy makers involved in all aspects of climate change.

While this course **is offered to** the student studying for Master of Science in Climate Change it is may be offered to graduate students studying any other field who wish to gain knowledge in economics of climate change for various applications. The course is organized in following eight areas:

- a) Pillars of sustainable development
- b) Economic, social, ecological dimensions
- c) Inter-relationships of the pillars to climate change adaptation
- d) Response to multiple stresses
- e) implications of environmental quality, and enhancement of adaptive capacities
- f) Factors that support sustainable development
- g) Two way causality between sustainable development and adaptive capacity
- h) Analyses of cost-effectiveness of the strategies for climate change mitigation, on a global scale and in various regions of the world.

## Course Objectives.

At the end of this course the learner should be able to:

1. Describe the pillars of sustainable development
2. Discuss the inter-relationships of the pillars to climate change adaptation
3. Discuss the response of economy to climate change and multiple stresses,
4. Analyze the implications of environmental quality, and enhancement of adaptive capacities to economic growth
5. Describe the factors that support sustainable development
6. Discuss the two way causality between sustainable development and adaptive capacity
7. Analyses of cost-effectiveness of the strategies for climate change mitigation, on a global scale and in various regions of the world.