

# Scientific and Spiritual Dimensions of Climate Change

## Introduction

13 February 2024

The aim of this course is to serve as a contribution to the efforts to empower individuals, groups, and institutions to address the environmental challenges in their communities and to engage in meaningful conversations for positive social change.

The topic of climate change is huge, and most people are overwhelmed by too much information, some of which may not even be accurate. The course aims to provide the necessary knowledge that every citizen of the world needs to build a society in harmony with nature. Clearly though, knowledge alone is not sufficient. Spiritual and ethical principles are needed for guidance and motivation, and to provide a vision for a just, peaceful, and environmentally sustainable world. A spiritual perspective and empowerment for action can also help with the despair that can be caused by the realization of the seriousness of the state of our world.

In the process of exploring the various issues raised by climate change, we will therefore use both **science and religion**:

- A scientific approach is used to provide a basic understanding of climate change.
- A spiritual approach is used to explore the ethical dimensions of climate change.

The course is based on the science presented in the reports of the Intergovernmental Panel on Climate Change (IPCC) and on up-to-date scientific research.

This is an **interfaith** course. It includes the teachings and wisdom of many religions. At the same time, it is written from a **Baha'i perspective**. The materials draw on the teachings of many faiths, for example when discussing stewardship of the Earth, justice, compassion, and love. Other teachings such as the importance of both science and religion, the fundamental equality of all human beings, and a world-embracing view are new in religious history, and the materials are based on the Baha'i teachings.

Scriptures were selected for their relevance in the context of climate change. That's why different religious scriptures are not represented equally in quantity. However, the respect shown for all religions is the same. Any faith group can use this course. The most interesting study groups may be those that represent the most diversity in the participants. The course can also be of interest to **scientists** who are interested in ethical and faith perspectives. Baha'is may use the course as supplementary materials to the books prepared by the Ruhi Training Institute.

Groups can adapt the materials to their special interests and circumstances. Perhaps a group has limited time to study together. It is possible to only discuss a selection of units according to the group's interest. *Many Ways of Using the Course Materials* provides some ideas about how to tailor them to the needs of the group and how to use the materials creatively.

Individuals can use the materials for personal study and as a resource for their service.

The **objectives** of the course are:

- Helping individuals and communities to consider environmental sustainability in their lives and activities.
- Becoming competent in explaining the problem of climate change and its ethical challenges and thus becoming an agent for positive change.
- Deepening our awareness of our interconnectedness with the earth and with all other people, and recognizing that an environmentally sustainable lifestyle not only contributes to a healthy environment, but is also vital for a spiritual life.
- Service is an integral part of the course, as well as developing skills for service.

For all groups, some service project, even on a small scale, would be highly beneficial. All the studying and meaningful conversations during group meetings will bear their highest fruit in some practical action. Each group can consult about their service project considering the needs of their community, the local environmental issues, the human and financial resources, and the time they can give to the project. The materials of Unit 10 are meant to assist in such actions.

The purpose of this course is to spread accurate knowledge about climate change and awareness of its ethical dimensions to many people. It should not be regarded as merely an enrichment for the participants. Therefore, you are encouraged to use your new insights in your conversations. Perhaps you can present specific topics that you think may be of special interest to family, friends, or youth groups. In this process you not only build your capacity but can become an agent for positive social change.

The despair that can be caused by the realization of the seriousness of the state of our world will be counteracted by opening up a spiritual perspective and by empowering the participants to action. The first section in class 9 Part 1 is devoted to dealing with the emotional stress that can be triggered when becoming more aware of the real threat of climate change.

Since its publication on 9 November 2009 on the website of the International Environment Forum, the course has been updated six times, and the last revision in 2024 consisted in a fundamental redesign. For transparency, you can read about the background of the course [here](#).

This course does not represent the views of any particular religion or institution. It also does not claim to be comprehensive. The issue of climate change is vast and complex, and its ethical implications are profound. Our purpose here is to lay a foundation upon which you will be able to build your own knowledge, to think on your own about the ethical dimensions, and to help make all your actions a service to humankind and a contribution to saving the foundation for life on this planet.

# Course Overview

## Unit 1 Nature and Humankind

- Section 1: Nature and Creation
- Section 2: Human Relationship with Nature
- Section 3: Interconnectedness and Interdependence in Nature
- Section 4: Sustainability

## Unit 2 Science and Religion

- Section 1: Science
    - What is science?
    - Models
    - Publication and Peer Review
    - Uncertainty and Scientific Consensus
    - The Intergovernmental Panel on Climate Change
    - The Limits of Science
    - The Position of Baha'i Institutions on Science and Climate Science
  - Section 2: Religion
  - Section 3: The Relationship of Science and Religion
  - Section 4: Misuse of Religion and Science
  - Section 5: Independent Investigation of Truth
  - Section 6: Science and Religion in this Course
- In the short version, the section on science is significantly shortened.*

## Unit 3 What is Climate Change? - The Impacts of Climate Change

- Section 1: What is Climate Change?
- Section 2: Heat Waves
- Section 3: Climate Change and its Impacts on the Water Cycle
- Section 4: Melting of Glaciers and the Polar Ice Caps
- Section 5: Sea Level Rise
- Section 6: Water Scarcity
- Section 7: Droughts
- Section 8: Climate Impacts on Soil and Agriculture
- Section 9: Extreme Weather Events – Storms and Floods
- Section 10: Forests
- Section 11: Wildfires
- Section 12: Loss of Biodiversity, Changes in Ecosystems
- Section 13: Ocean Acidification
- Section 14: Impact on Ocean Currents
- Section 15: Effects on Human Health
- Section 16: Impacts on Energy Supply
- Section 17: Multiple Stresses
- Section 18: Displacement and Migration
- Section 19: Conflicts over Natural Resources

## **Unit 4 The Causes of Climate Change**

Section 1: Scientific Observations of Global Warming and Changes in Climate

Section 2: Why Is the Earth Warming?

Photosynthesis

The Carbon Cycle

The Greenhouse Effect

A little bit of climate science history

Greenhouse Gases

Section 3: Where Does the Warming Go?

Section 4: A Look into the Past

Section 5: The Present and the Future

## **Unit 5 Climate Change Mitigation - What Must Be Done**

Section 1: The Broader Social and Environmental Context of Climate Change Mitigation

Section 2: Mitigation and Adaptation

Section 3: Energy Generation and Use

Section 4: Transportation

Section 5: Sustainable Agriculture

Section 6: Reducing Deforestation and Planting Trees

Section 7: Garbage – an Obsolete Concept

Section 8: Economic Changes

## **Unit 6 Spiritual Principles for a Sustainable World**

Section 1: Stewardship of the Earth

Section 2: Various Aspects of Justice

1. Vulnerable Populations

2. Inequitable Emissions

3. Economic Injustice

4. Intergenerational Injustice

Section 3: Eradication of the Extremes of Wealth and Poverty

Section 4: Spirituality as Opposed to Materialism

Section 5: Moderation

Section 6: Fostering Unity with a Non-Judgemental Attitude

**Materialism** Optional additional resource

## **Unit 7 Ethical Principles for Social Transformation**

Section 1: The Oneness of Humankind

Section 2: The Need for a World Federal System

Section 3: Decentralization and Empowerment at the Grassroots

Section 4: Participation of the Local Population, Especially Indigenous People

Section 5: The Empowerment of Women

Section 6: Consultation  
Section 7: Trustworthiness – an Antidote for Corruption  
Section 8: Education

## **Unit 8 Addressing a Challenging Reality**

**Part 1 - Prospects for the Future** (for more insights into the science, optional)

Section 1: Future Threats  
Section 2: Feedback Mechanisms  
Section 3: The Longterm Perspective

**Part 2 - Addressing a Challenging Reality**

Section 1: A Challenging Reality  
Section 2: A Shift in Thinking

## **Unit 9 Reasons for Hope**

**Part 1 - The Role of Religious Communities**

Section 1: Dealing with the Emotional Stress Caused by Climate Change  
Section 2: The Role of Religious Communities  
Section 3: What is Progress?  
Section 4: A Promise and a Responsibility

**Part 2 - Hope in a World of Turmoil - a Bahá'í Perspective**

Section 1: What do the Bahá'í teachings say about the current global crisis?  
Section 2: The Challenge for the Bahá'í Community  
Section 3: The Hopeful Vision of a New Spiritual World Order

## **Unit 10 A Holistic Approach to Action**

Section 1: Individual Actions  
Section 2: A Holistic Approach to Action  
Section 3: Public Discourse  
Section 4: Social Action  
Section 5: Community Building  
Section 6: Education  
    A. The Importance of Environmental Education in the Bahá'í Community  
    B. Incorporating Environmental Education in Bahá'í Activities