Online modules starting in February 2010

The four parts of the course is structured in 17 internet based E-learning modules with weekly deadlines starting on 1 February 2010, and with examination in week 25, 2010.

Through distance learning the course can be followed from everywhere in the world, and it is open for MSc students and continuing education students with a relevant BSc background in natural science, social science and economics.

There is a limit of 60 students, which will be selected in order to create international and interdisciplinary student groups of 12-15 students.

Teacher team

Course responsible teachers
- Chr. Bugge Henriksen, Assistant Professor at the Department of Agriculture and Ecology
- John R. Porter, Professor at the Department of Agriculture and Ecology, and member of the IPCC

Teachers from the University of Copenhagen
- Alex Dubgaard, Associate Professor at the Department of Food and Resource Economics
- Anita Rønne, Asociate Professor at the Faculty of Law
- Anette Reenberg, Professor at the Department of Geography and Geology
- Brian Jacobsen, Senior Researcher at the Department of Food and Resource Economics
- Christian R. Jensen, Associate Professor at the Department of Agriculture and Ecology
- Frank Jensen, Associate Professor at the Department of Food and Resource Economics
- Johannes Kollmann, Associate Professor at the Department of Agriculture and Ecology
- Jørgen Peder Steffensen, Associate Professor at the Centre for Ice and Climate
- Marina Bergen Jensen, Senior Researcher at the Centre for Forest and Landscape
- Ole John Nielsen, Professor at the Department of Chemistry, and member of the IPCC
- Peter Furu, Senior Advisor at the Centre for Health Research and Development
- Stefan Pauleit, Professor at the Centre for Forest and Landscape
- Susan Stipp, Professor at the Nano-Science Centre

Teachers from collaborating institutions
- Daniel M. Kammen, Professor in the Energy and Resources group at UC Berkeley, member of the IPCC, and Senior Climate Advisor for Barack Obama
- Jens Hesselbjerg Christensen, Senior Advisor in the Climate Research Division at the Danish Meterological Institute, and member of the IPCC
- Kersty Hobson, Lecturer in the Fenner School of Environmentt and Society at the Australian National University

Course registration and additional info at www.climate-change.dk

UNIVERSITY OF COPENHAGEN
FACULTY OF LIFE SCIENCES

Climate Change Impacts Adaptation and Mitigation



An interdisciplinary 15 ECTS Online MSc course offered by the University of Copenhagen in cooperation with the Danish Meteorological Institute, University of California – Berkeley, and Australian National University

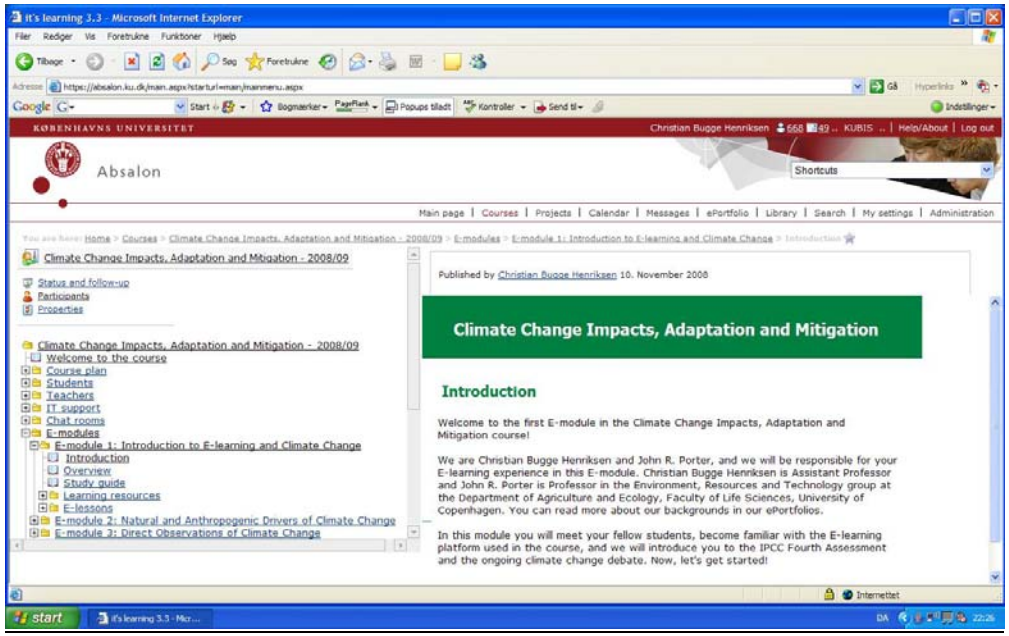
Course registration at www.climate-change.dk

Course Contents

Climate Change Impacts, Adaptation and Mitigation is an interdisciplinary Online course offered by the University of Copenhagen in close cooperation with the Danish Meteorological Institute, UC Berkeley and Australian National University.

The focus of the course is climate change impacts and the human response to climate change, including efforts to adapt to climate change, as well as efforts to avoid or reduce the negative impacts of climate change. Using the IPCC Fourth Assessment Report as the main reference together with recent complementary and contrasting findings, the relevant managerial and economic tools are applied to analyse and discuss the different aspects of climate change.

The course is divided in four main parts. In the first part of the course the Online platform is introduced and a basic understanding of the physical science of climate change is given, together with a brief introduction to the ongoing climate change debate. Natural and anthropogenic drivers, and direct observations of recent climate change are presented. Different climate change models and scenarios are presented and discussed in relation to future climate change projections.



In the second part of the course the impacts of climate change and potential adaptation strategies in different sectors are presented. After a short introduction to adaptive managemen and adaptive capacity, the climate change impacts and adaptation practices for ecosystems, land use, water resources, society and human health are presented and discussed in relation to both options, constraints, costs and benefits.

The third part of the course deals with different climate change mitigation strategies. First, a number of strategies are presented, including carbon sequestration, transition to carbon neutral energy sources, geo-engineering as well as measures to increase energy efficiency. Afterwards, it is analyzed and discussed which of the strategies for climate change mitigation are the most effective and cost-effective, both on a global scale and in various regions of the world.

In the fourth and final part of the course the focus is climate change policy and social change. First, the current status of international climate change negotiations is discussed. Afterwards, the regulatory instruments that may be applied to achieve climate change policy goals are presented. Finally, the course ends with a discussion of the need for voluntary agreements and social change in order to reduce the negative impacts of climate change.