
 [Please read our student and staff community guidance on Covid-19](#)

Challenges of Climate Change

[Moodle page for this module](#) 

UN Sustainable Development Goals:



GD305

Module Leaders

Dr Jessica Savage

Dr Michael Pounds

Professor David Mond

Option - Second and final years

Term 1

15 CATS

10 x 2 hour lectures

9 weekly 2-hour seminars

*Available to students from outside GSD by
application*

This module is available to non-GSD students as a 7.5 CATS option (lectures only) or, for a limited number of students, as a 15 CATS option (lectures and seminars).

Principal Aims

To provide undergraduates from a wide range of backgrounds with an up-to-date view of the central challenges that climate change poses. This will be delivered from experts across different disciplines, (Global Sustainable Development, Economics, Law, Mathematics, Physics, Politics, Statistics, and Business Studies) and is open to students from all disciplines, from across the university. Following the course, we aim to equip students to address these challenges. The students should be able to:

- a) Understand the major issues that climate change raises across a range of disciplines (science, economics, politics, engineering etc).
- b) Explain the approaches to these challenges that are currently at play, or proposed, and the problems they create.
- c) Appreciate the role of uncertainty in climate change, how this may be folded into actions, and how it is implemented across different fields (where it often has slightly different meanings).
- d) Critically examine material relating to climate and climate change, and assess its reliability.
- e) Be able to meaningfully discuss the nature of climate change with individuals from a wide range of backgrounds.

The changes to global climate being brought about by human activity present one of the greatest challenges to confront humanity, and are likely to have a profound effect over the working lives of today's students. Understanding them requires a comprehensive approach spanning multiple disciplines. The aim of this module is to equip students to begin to do this, by providing a grounding in the central scientific, economic and political issues surrounding climate change.

Principal themes of the module:

- The underlying physical processes that govern global climate, the evidence for human-induced warming, predictions for the future, and assessment of mitigation strategy.
- Ecological, economic and social consequences of climate change.
- Difficulties in the way of reaching a political consensus for action to mitigate climate change; political strategies and technological mechanisms to overcome them, and to adapt to future changes.

Students taking this module will gain a solid understanding of the major challenges that climate change presents, together with knowledge enabling them to participate actively and constructively in the efforts to meet them.

Syllabus

This is an interdisciplinary course, which will address the major scientific, philosophical, social, economic, political and technological challenges arising from climate change (real or imagined, manmade or not). It will cover the central issues of the field with expert lecturers, who will speak at a level accessible to non-experts in the field, with the only requirements being a grasp of Science and Mathematics to GCSE level and a willingness to keep abreast of current developments.

Schedule of Lectures

Week 1 (October 4th): Introduction: Alastair Smith -- The evidence; David Mond -- The politics and the treaties.

Week 2 (October 11th): Michael Pounds -- The science of climate change, I.

Week 3 (October 18th): Michael Pounds -- The science of climate change, II.

Week 4 (October 25th): Jessica Savage -- Effects on the living world.

Week 5 (November 1st): Tim Burnet -- The economics of climate change and climate agreement

Week 6 (November 8th): Harpreet Paul -- Climate change and the law; David Mond -- Uncertainty

Week 7 (November 15th): David Elmes -- How can business respond?

Week 8 (November 22nd): Alastair Smith -- Migration; Leon Sealey-Huggins - Climate change in developing countries

Week 9 (November 29th): Simon Caney -- Climate Justice; Lecturer t.b.c. -- China's climate policies and politics

Week 10 (December 6th) : Various speakers -- Climate forum and debate

Assessment

15 CATS

Exam

Coursework

1 x 3 hour exam (70%)

1x 2500 word essay (20%)

Online test (10%)

7.5 CATS

Exam


Coursework

1 x 1 1/2 hour exam (80%)

Online test (20%)

Other links and events

[Climate change in the news](#) 

[Climate 2020](#)  - the UN on how to fulfil the promises of Paris 2015

[Honorary Degree](#)  at Warwick for Christiana Figueres

[Climate-related activities](#)  at Warwick



[Contact Us](#)

Global Sustainable Development

R3.23, Ramphal Building, School of Cross-faculty Studies

University of Warwick, Coventry, CV4 7AL, United Kingdom



Page contact: [Jessica Savage](#)

Last revised: Thu 31 Oct 2019

Powered by [Sitebuilder](#) | [© MMXX](#) | [Terms](#) | [Privacy/IDC](#) | [Cookies](#) | [Accessibility](#)