

Carbon and climate literacy: teaching resources

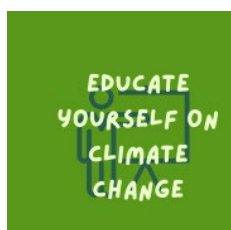
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Introduction

*University will probably be developing additional resources to support staff and students on this important issue in the future.

If you have expertise on this topic and know of resources that you think would be useful to share across other subject areas, please contact cie@liverpool.ac.uk

Extracurricular resources for students



[Educate yourself about climate change](#) – the ‘Student Sustainability Hub’ in Canvas that all students have automatic access to has some short introductory resources developed by student interns on the basics of climate change. (you can circulate this link to your students but it’s not accessible to staff – see below)

[Student Sustainability Hub staff version](#) – staff can gain access to a staff only version of the ‘Student Sustainability Hub’ to review these resources.



[Climate Fresk](#) – is a free international climate change programme of online and face to face workshops that you can direct your students to – and take yourself.

(CIE staff are Climate Fresk workshop facilitators – please contact cie@liverpool.ac.uk for more information.)

Staff CPD resources

[Carbon Literacy Project higher education toolkit](#) – UK higher education courses & resources for staff wanting to learn more about carbon and climate literacy.

Curricular examples

Examples of how you could incorporate carbon and climate literacy into different subject areas:

[UK Universities Climate Network Briefings](#) – scroll to base of webpage to find

‘Mainstreaming climate change education in UK HEI’s case studies.’

[Embedding research-based education for sustainable development and climate education in HE curricula](#) Strathclyde University

The University of Strathclyde are embedding Research-Based Education (RBE) for Sustainable Development into undergraduate curricula using an innovative pedagogy called Vertically Integrated Projects (VIP) and aligning this with United Nations Sustainable Development Goal (UN SDG)-focused research. The development of student-centred Climate Education workshops is being used to ensure students are offered joined-up Climate Education activity that can support Strathclyde’s broader Education for Sustainable Development agenda.

Examples of climate change education in different subject areas



[Climate Solutions Lab Syllabus Bank](#) – examples of courses from a range of subjects from different universities across the world. Includes examples from non-natural and physical sciences for example:

Psychology: moral psychology and climate change

There’s an old saying that if you want to change the world, you need to know which levers to pull. In this course, we’ll consider some of those levers, especially those that lie within ourselves. We’ll use research in the interdisciplinary field of moral psychology to explore the philosophic and ethical facets of climate change, and aim for a better understanding of what exactly it is about the climate crisis that makes it so difficult for us to grasp and effectively act on.

Sociology: climate and social vulnerability

Vulnerable, at risk, prone, fragile, precarious – coping, secure, adapted, resilient. What do these terms mean? How do they and the concepts behind them inform our approach to reducing the likelihood of damage in the face of climate stress? Climate extremes and climate change call for and justify policies to protect exposed and sensitive individuals and groups. Why, however, are these people vulnerable in the first place? How does gender, ethnicity, race, caste, class, religion, place of origin, age, profession, education shape people’s risk? Who is vulnerable and how did they come to be exposed and sensitive?

Law: climate change law and policy

The course aims to provide a basic understanding of the climate change challenge and key legal mechanisms and policies related to climate change mitigation and adaptation. It focuses on international and EU law, while also considering examples from national jurisdictions.

Political sciences: climate change and conflict

Climate Change and Conflict explores how climate change influences cooperation and conflict within nation-states, examining who are the “winners” and who are the “losers.” Using a social scientific approach that emphasizes formal modelling and empirical analysis, students will consider how climate change impacts the availability and cost of a variety of natural resources. The course will begin with an introduction to necessary scientific frameworks and models, including integrated assessment modelling of economics and game-theoretic models of conflict. Such tools will be applied to different aspects of the climate-conflict nexus, and students will explore the range of policy interventions that can either increase cooperation or conflict.

Health sciences: climate risk and health solutions

Climate risks are no longer theoretical. This course provides students with a broad overview of the health consequences of climate change resulting from changing temperatures, extreme weather, fires, air pollution, and water quality. The course will introduce students to practical solutions that both reduce greenhouse gas emissions and improve human health. These solutions include energy efficiency and decarbonization in buildings, electrifying transportation, changing food production, and engagement with healthcare organizations. Students will be exposed to a range of practitioners working to implement solutions in a variety of sectors. They will gain practical skills needed to support the development of regulations, policies, and programs. Assignments will give students experience developing written materials and practicing oral skills to engage in climate policy work.

[Office for Climate Education pedagogic resources database](#) - most resources are aimed at school level, but you might find some basic introductory resources useful to your students.

Additional resources

The University's Net Zero Climate Plan:

[Net Zero Climate Plan 2022-2035 – student and their education commitments](#)

Sector initiatives:

[Climate Commission Futures of Education focus Groups report](#)

[UK Universities Climate Network: mainstreaming climate change education in UK higher education institutions](#)

Research:

[Handling climate change education at universities: an overview](#)



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