UCL Social Research Institute

UCL Social Research Institute
Environment and Climate Change
SOCS0078

Module Handbook
2024-2025

Module Leader(s): Tobias Rüttenauer
Email(s): t.ruttenauer@ucl.ac.uk

Top tips

1. Read the module handbook in conjunction with the assessment and regulation information in your Moodle page. The module handbook is your roadmap for the module, with key information you need about the module and assignments.
2. UCL requires sufficient student engagement which will be monitored throughout the module in various ways. You may be unable to enter for module assessment in case of insufficient engagement. Please refer to the Programme Handbook located on the SRI UG Programmes Hub for more details.
3. Make sure you do some reading every week. Use the module handbook to guide you.
4. Use the UCL and IOE libraries to access the course readings.
5. Use Moodle to download material and to participate in discussions with other students and tutors.
6. Read the criteria for grading of assignments in the Programme Handbook under section 4 'Information on Assessment' and on Moodle in the assessments section. This includes information about word count – what is included and what penalties there are for not meeting the word count target. This information is there to help you.
7. Ensure that you adhere to all assessment deadlines. Late penalties will be applied as per UCL policy: UCL Academic Manual: Module Assessment. This is also available in the assessment section on the module Moodle page.

If you have any study-related difficulties do contact the Module Leader or your Personal Tutor, earlier rather than later.

If you have a disability-related query, please contact the Student Wellbeing team through askUCL. More information can be found on the Student Support and Wellbeing Website.

Contents

1. INTRODUCTION

1.1. Module Timings

Attendance is required at all timetabled teaching events, including lectures and seminars. More information about attendance can be found in the Section 3: Attendance and Absence in the UCL Academic manual.

The days and times are given below:

Type	Day	Time	Location
Lecture:	Tuesday	11am – 1pm	IOE - Bedford Way (20) A5.03
Seminar:	Tuesday	1pm – 2pm	IOE - Bedford Way (20) A5.03

1.2. Schedule

TERM 1:	Lectures
Week 1	The Science of Climate Change
Week 2	Population, Climate, and Policy
Week 3	Macro-Economic Perspectives on Climate Change
Week 4	Health Impacts of the Environment & Climate Change
Week 5	Extreme Weather Events and Climate Adaptation
Reading Week (4-8 Nov.)	
Week 6	Prisoner's Dilemma and Tragedy of the Commons
Week 7	Policies and Institutions
Week 8	Attitudes and Behaviour
Week 9	Public Opinion and Social Movements
Week 10	Distributional Aspects of Climate Change
Winter break	

1.3. Term Dates

Students should refer to the UCL term dates webpage for full details about term dates and university closures.

Autumn term dates:

- First week of Teaching: week commencing 30th September 2024
- Reading Week: week commencing 4th November 2024
- Last week of Teaching: week commencing 9th December 2024

1.4. Contact Details

Module Leader(s) Name: Tobias Rüttenauer
Email: t.ruttenauer@ucl.ac.uk
Office hours and Location: Tuesdays. E-mail in advance to set up an appointment.
Meetings at other times or on-line also possible, again e-mail to set this up.
Office: Room 211, 55-59 Gordon Square {here}

Module administrator: Aidan Young
Email: aidan.young@ucl.ac.uk

Programme Administration team contacts

- Social Sciences: bsc-socsciences@ucl.ac.uk
- Social Sciences with Data Science: bsc-socsciencesdatascience@ucl.ac.uk
- Sociology: bsc-sociology@ucl.ac.uk

Your Programme Administration team are based on Level 5, Main IOE Building on select days of the week. Please report to the IOE Student Helpdesk on arrival. Please book an appointment by email (which can take place either in person or online).

1.5. UCL Academic Manual

The UCL Academic Manual outlines the academic regulations, policies and procedures applicable to all University College London students.

1.6. Virtual Learning Environment: Moodle

Moodle is a virtual learning environment that we will be using throughout this module. You will be registered to use Moodle once you have registered for the module. Moodle is where you can see

which readings relate to each week of the module and find the key information about this module's assessments (including information on word counts and submission deadlines).

You will need your UCL login details to access Moodle, if you are unsure of your account information, please refer to the Information Services Division webpage.

For assistance with Moodle please go to the very useful 'Student Help' section on your Moodle homepage. For technical queries please email the Computer Helpdesk.

1.7. Communication

If tutors need to communicate with you personally, they will usually email you. Much of the communication between staff and students takes place electronically. **Please note that messages will normally only be sent via Moodle, or directly to your UCL email address.** It is vital that you check your UCL inbox on a regular basis.

Please ensure that your current address and contact details are kept up to date on Portico.

2. MODULE OVERVIEW

2.1. Module Summary

This module introduces students to the politics, the sociology, and the economics of the environment and climate change. Topics covered include the changing public opinion on climate change and the social bases of pro-environment behaviour, the prisoner dilemma and tragedy of the commons, and the challenge of designing effective policy responses at the national and international level. Moreover, we investigate the role of public opinion and social movements in shaping environmental policy. Finally, we consider the unequal economic and social impact of climate change, including distributional aspects and consequences of extreme weather events.

2.2. Module Aims

This module aims to

- introduce students to the key debates concerning the environment and climate change;
- prepare them for further research in the sociology, politics and economics of environment and climate change;
- give them the analytical tools to engage in relevant evidence-based discussions in the UK and beyond.

2.3. Learning Outcomes

By the end of the module, students will

- have a good understanding of the sociological, political and economic issues concerning the environment and climate change.
- be able to relate research results to public debates and policy discussion in the relevant areas, and to evaluate these claims critically;
- have an awareness of the data, measurement and modelling issues that are pertinent to policy discussion.

2.4. Teaching Approach

Teaching on the module takes place through engagement with ten weekly topics. All teaching is face-to-face.

Lectures will be provided in 2-hour sessions – Face-to-face interaction will also be delivered over each of the ten weeks in the form of 1 seminar sessions and/or other activities.

Please refer to 1.1 Module Timings on page 4 for timings of this module.

Please make sure you read the key readings listed below before the lecture every week.

3. WEEKLY TEACHING

3.1. W1: The Science of Climate Change

This session introduces the fundamental scientific principles of climate change, including the greenhouse effect, carbon cycles, and the evidence for anthropogenic global warming. It covers climate models, predictions, and the uncertainty associated with climate science.

Key concepts

- Anthropogenic Climate Change
- Climate Models
- IPCC Reports

After completing this session, you should:

- Understand the basic scientific principles behind climate change, including anthropogenic causes and the greenhouse effect.
- Be able to explain how climate models predict future climate changes and their associated uncertainties.
- Be familiar with key reports from the IPCC and their role in communicating climate science.

Key readings

IPCC. (2023). AR6 Synthesis Report: Climate Change 2023. https://report.ipcc.ch/ar6syr/pdf/IPCC_AR6_SYR_LongerReport.pdf

IPCC. (2021). Climate Change 2021: The Physical Science Basis (Working Group III contribution). https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_FullReport_small.pdf

(The IPCC also publishes Summaries for Policymakers Headline Statements)

Additional Readings:

Dietz, T., Shwom, R. L., & Whitley, C. T. (2020). Climate change and society. Annual Review of Sociology, 46(1), 135–158. https://doi.org/10.1146/annurev-soc-121919-054614

Pellow, D. N., & Nyseth Brehm, H. (2013). An Environmental Sociology for the Twenty-First Century. Annual Review of Sociology, 39(1), 229–250. https://doi.org/10.1146/annurev-soc-071312-145558

3.2. W2: Population, Climate, and Policy

This session explores the relationship between population dynamics, climate change, and policy. It

examines how population growth, urbanization, and migration influence climate policies and the challenges of integrating demographic trends into climate adaptation and mitigation strategies.

Key concepts

- Population Growth & “Overpopulation”
- IPAT
- Climate Projections

After completing this session, you should:

- Understand how population growth, urbanization, and migration interact with climate change.
- Be able to evaluate the discussion about “overpopulation” and climate change.
- Be familiar with concepts like IPAT (Impact = Population x Affluence x Technology) and climate projections.

Key readings

Lutz, W., & Muttarak, R. (2017). Forecasting societies’ adaptive capacities through a demographic metabolism model. Nature Climate Change, 7(3), 177–184. https://doi.org/10.1038/nclimate3222

Riahi, K., Van Vuuren, D. P., Kriegler, E., Edmonds, J., O’Neill, B. C., Fujimori, S., Bauer, N., Calvin, K., Dellink, R., Fricko, O., Lutz, W., Popp, A., Cuaresma, J. C., Kc, S., Leimbach, M., Jiang, L., Kram, T., Rao, S., Emmerling, J., … Tavoni, M. (2017). The Shared Socioeconomic Pathways and their energy, land use, and greenhouse gas emissions implications: An overview. Global Environmental Change, 42, 153–168. https://doi.org/10.1016/j.gloenvcha.2016.05.009

Pachauri, S. (2024). Re-examining the role of population policies in climate action. Vienna Yearbook of Population Research, 2024. https://doi.org/10.1553/p-34hn-pfcb

Additional Readings:

Dietz, T., & Rosa, E. A. (1994). Rethinking the Environmental Impacts of Population, Affluence and Technology. Human Ecology Review, 1(2), 277–300.

Liddle, B. (2014). Impact of population, age structure, and urbanization on carbon emissions/energy consumption: Evidence from macro-level, cross-country analyses. Population and Environment, 35(3), 286–304. https://doi.org/10.1007/s11111-013-0198-4

Liddle, B., & Lung, S. (2010). Age-structure, urbanization, and climate change in developed countries: Revisiting STIRPAT for disaggregated population and consumption-related environmental impacts. Population and Environment, 31(5), 317–343. https://doi.org/10.1007/s11111-010-0101-5

Lutz, W., Muttarak, R., & Striessnig, E. (2014). Universal education is key to enhanced climate adaptation. Science, 346(6213), 1061–1062. https://doi.org/10.1126/science.1257975

Lutz, W. (2024). Overshooting global warming and overshooting fertility decline. Beyond the smooth stabilization paradigm. Vienna Yearbook of Population Research, 22. https://doi.org/10.1553/p-35m2-3ce3

Raftery, A. E., Li, N., Ševčíková, H., Gerland, P., & Heilig, G. K. (2012). Bayesian probabilistic population projections for all countries. Proceedings of the National Academy of Sciences, 109(35), 13915–13921. https://doi.org/10.1073/pnas.1211452109

Sear, R. (2021). Demography and the rise, apparent fall, and resurgence of eugenics. Population Studies, 75(sup1), 201–220. https://doi.org/10.1080/00324728.2021.2009013

Van Dalen, H. P., & Henkens, K. (2021). Population and Climate Change: Consensus and Dissensus among Demographers. European Journal of Population, 37(3), 551–567. https://doi.org/10.1007/s10680-021-09580-6

Weil, D. N., & Wilde, J. (2009). How Relevant Is Malthus for Economic Development Today? American Economic Review, 99(2), 255–260. https://doi.org/10.1257/aer.99.2.255

3.3. W3: Macro-Economic Perspectives on Climate Change

This session focuses on the economic aspects of climate change, particularly the link between economic growth and environmental degradation.

Key concepts

- Environmental Kuznet Curve
- Decoupling
- Green growth
- Degrowth

After completing this session, you should:

- Understand the relationship between economic growth and environmental degradation, including concepts like the Environmental Kuznet Curve.
- Be able to differentiate between growth models such as decoupling, green growth, and degrowth.
- Evaluate the implications of economic perspectives on sustainable development and climate change mitigation.

Key readings

Jorgenson, A. K., & Clark, B. (2012). Are the Economy and the Environment Decoupling? A Comparative International Study, 1960–2005 1. American Journal of Sociology, 118(1), 1–44. https://doi.org/10.1086/665990

Stern, D. I. (2004). The Rise and Fall of the Environmental Kuznets Curve. World Development, 32(8), 1419–1439. https://doi.org/10.1016/j.worlddev.2004.03.004

Vogel, J., & Hickel, J. (2023). Is green growth happening? An empirical analysis of achieved versus Paris-compliant CO2–GDP decoupling in high-income countries. The Lancet Planetary Health, 7(9), e759–e769. https://doi.org/10.1016/S2542-5196(23)00174-2

Additional Readings:

Fanning, A. L., O'Neill, D. W., Hickel, J., & Roux, N. (2021). The social shortfall and ecological overshoot of nations. Nature Sustainability, 5(1), 26–36. https://doi.org/10.1038/s41893-021-00799-z

Franzen, A., & Mader, S. (2018). Consumption-based versus production-based accounting of CO2 emissions: Is there evidence for carbon leakage? Environmental Science & Policy, 84, 34–40. https://doi.org/10.1016/j.envsci.2018.02.009

Grossman, G. M., & Krueger, A. B. (1995). Economic Growth and the Environment. The Quarterly Journal of Economics, 110(2), 353–377. https://doi.org/10.2307/2118443

Jorgenson, A. K., Fiske, S., Hubacek, K., Li, J., McGovern, T., Rick, T., Schor, J. B., Solecki, W., York, R., & Zycherman, A. (2019). Social science perspectives on drivers of and responses to global climate change. WIREs Climate Change, 10(1), e554. https://doi.org/10.1002/wcc.554

Lamb, W. F., Wiedmann, T., Pongratz, J., Andrew, R., Crippa, M., Olivier, J. G. J., Wiedenhofer, D., Mattioli, G., Khourdajie, A. A., House, J., Pachauri, S., Figueroa, M., Saheb, Y., Slade, R., Hubacek, K., Sun, L., Ribeiro, S. K., Khennas, S., De La Rue Du Can, S., … Minx, J. (2021). A review of trends and drivers of greenhouse gas emissions by sector from 1990 to 2018. Environmental Research Letters, 16(7), 073005. https://doi.org/10.1088/1748-9326/abee4e

Le Quéré, C., Korsbakken, J. I., Wilson, C., Tosun, J., Andrew, R., Andres, R. J., Canadell, J. G., Jordan, A., Peters, G. P., & Van Vuuren, D. P. (2019). Drivers of declining CO2 emissions in 18 developed economies. Nature Climate Change, 9(3), 213–217. https://doi.org/10.1038/s41558-019-0419-7

Stern, D. I. (2017). The environmental Kuznets curve after 25 years. Journal of Bioeconomics, 19(1), 7–28. https://doi.org/10.1007/s10818-017-9243-1

York, R., Rosa, E. A., & Dietz, T. (2003). Footprints on the Earth: The Environmental Consequences of Modernity. American Sociological Review, 68(2), 279–300. https://doi.org/10.2307/1519769

3.4. W4: Health Impacts of the Environment & Climate Change

This session examines the direct and indirect effects of environmental degradation and climate change on public health. Topics include air quality, heat stress, and the disproportionate health impacts on vulnerable populations.

Key concepts

- Air Pollution
- Heat Stress
- Vulnerable Populations

After completing this session, you should:

- Understand the direct and indirect health impacts of environmental degradation and climate change.
- Be able to assess the disproportionate health risks faced by vulnerable populations, particularly regarding air pollution and heat stress.
- Recognize the public health challenges posed by climate change and potential mitigation strategies.

Key readings

Andriano, L. (2023). On the Health Impacts of Climatic Shocks: How Heatwaves Reduce Birthweight in Sub-Saharan Africa. Population and Development Review, 49(4), 737–769. https://doi.org/10.1111/padr.12583

Dimitrova, A., & Muttarak, R. (2020). After the floods: Differential impacts of rainfall anomalies on child stunting in India. Global Environmental Change, 64, 102130. https://doi.org/10.1016/j.gloenvcha.2020.102130

Obradovich, N., Migliorini, R., Paulus, M. P., & Rahwan, I. (2018). Empirical evidence of mental health risks posed by climate change. Proceedings of the National Academy of Sciences, 115(43), 10953–10958. https://doi.org/10.1073/pnas.1801528115

Additional Readings:

Conte Keivabu, R., Cozzani, M., & Wilde, J. (2024). Temperature and fertility: Evidence from Spain. Population Studies, 1–15. https://doi.org/10.1080/00324728.2024.2382152

Conte Keivabu, R., & Rüttenauer, T. (2022). London Congestion Charge: The Impact on Air Pollution and School Attendance by Socioeconomic Status. Population and Environment, 43(4), 576–596. https://doi.org/10.1007/s11111-022-00401-4

Grace, K., Davenport, F., Hanson, H., Funk, C., & Shukla, S. (2015). Linking climate change and health outcomes: Examining the relationship between temperature, precipitation and birth weight in Africa. Global Environmental Change, 35, 125–137. https://doi.org/10.1016/j.gloenvcha.2015.06.010

Josey, K. P., Delaney, S. W., Wu, X., Nethery, R. C., DeSouza, P., Braun, D., & Dominici, F. (2023). Air Pollution and Mortality at the Intersection of Race and Social Class. New England Journal of Medicine, NEJMsa2300523. https://doi.org/10.1056/NEJMsa2300523

Romanello, M., Napoli, C. D., Green, C., Kennard, H., Lampard, P., Scamman, D., Walawender, M., Ali, Z., Ameli, N., Ayeb-Karlsson, S., Beggs, P. J., Belesova, K., Berrang Ford, L., Bowen, K., Cai, W., Callaghan, M., Campbell-Lendrum, D., Chambers, J., Cross, T. J., … Costello, A. (2023). The 2023 report of the Lancet Countdown on health and climate change: The imperative for a health-centred response in a world facing irreversible harms. The Lancet, 402(10419), 2346–2394. https://doi.org/10.1016/S0140-6736(23)01859-7

Thompson, R., Lawrance, E. L., Roberts, L. F., Grailey, K., Ashrafian, H., Maheswaran, H., Toledano, M. B., & Darzi, A. (2023). Ambient temperature and mental health: A systematic review and meta-analysis. The Lancet Planetary Health, 7(7), e580–e589. https://doi.org/10.1016/S2542-5196(23)00104-3

van Daalen, K. R., Romanello, M., Rocklöv, J., Semenza, J. C., Tonne, C., Markandya, A., Dasandi, N., Jankin, S., Achebak, H., Ballester, J., Bechara, H., Callaghan, M. W.,

Chambers, J., Dasgupta, S., Drummond, P., Farooq, Z., Gasparyan, O., Gonzalez-Reviriego, N., Hamilton, I., … Lowe, R. (2022). The 2022 Europe report of the Lancet Countdown on health and climate change: Towards a climate resilient future. The Lancet Public Health, 7(11), e942–e965. https://doi.org/10.1016/S2468-2667(22)00197-9

3.5. W5: Extreme Weather Events and Climate Change Adaptation

This session discusses the increasing frequency and intensity of extreme weather events due to climate change and the strategies for adapting to these challenges. It covers disaster risk reduction, but also adaptation strategies like migration and its consequences.

Key concepts

- Extreme Weather Events
- Disaster Risk Reduction
- Climate Migration

After completing this session, you should:

- Understand the link between climate change and migration.
- Be able to explain key climate adaptation strategies, including disaster risk reduction and climate migration.
- Assess the social, economic, and environmental consequences of adaptation strategies.

Key readings

Hauer, M. E., Jacobs, S. A., & Kulp, S. A. (2024). Climate migration amplifies demographic change and population aging. Proceedings of the National Academy of Sciences, 121(3), e2206192119. https://doi.org/10.1073/pnas.2206192119

Thomas, K., Hardy, R. D., Lazrus, H., Mendez, M., Orlove, B., Rivera-Collazo, I., Roberts, J. T., Rockman, M., Warner, B. P., & Winthrop, R. (2019). Explaining differential vulnerability to climate change: A social science review. WIREs Climate Change, 10(2). https://doi.org/10.1002/wcc.565

van Valkengoed, A. M., & Steg, L. (2019). Meta-analyses of factors motivating climate change adaptation behaviour. Nature Climate Change, 9(2), 158–163. https://doi.org/10.1038/s41558-018-0371-y

Additional Readings:

Abel, G. J., Brottrager, M., Crespo Cuaresma, J., & Muttarak, R. (2019). Climate, conflict and forced migration. Global Environmental Change, 54, 239–249. https://doi.org/10.1016/j.gloenvcha.2018.12.003

De Sherbinin, A., Grace, K., McDermid, S., Van Der Geest, K., Puma, M. J., & Bell, A. (2022). Migration Theory in Climate Mobility Research. Frontiers in Climate, 4, 882343. https://doi.org/10.3389/fclim.2022.882343

Hoffmann, R., Dimitrova, A., Muttarak, R., Crespo Cuaresma, J., & Peisker, J. (2020). A meta-analysis of country-level studies on environmental change and migration. Nature Climate Change, 10(10), 904–912. https://doi.org/10.1038/s41558-020-0898-6

Klinenberg, E., Araos, M., & Koslov, L. (2020). Sociology and the Climate Crisis. Annual Review of Sociology, 46(1), 649–669. https://doi.org/10.1146/annurev-soc-121919-054750

Obradovich, N., & Fowler, J. H. (2017). Climate change may alter human physical activity patterns. Nature Human Behaviour, 1(5), 0097. https://doi.org/10.1038/s41562-017-0097

Paauw, M., Smith, G., Crabbé, A., Fournier, M., Munck Af Rosenschöld, J., Priest, S., & Rekola, A. (2024). Recognition of differences in the capacity to deal with floods—A cross-country comparison of flood risk management. Journal of Flood Risk Management, e12965. https://doi.org/10.1111/jfr3.12965

Shi, L., Chu, E., Anguelovski, I., Aylett, A., Debats, J., Goh, K., Schenk, T., Seto, K. C., Dodman, D., Roberts, D., Roberts, J. T., & VanDeveer, S. D. (2016). Roadmap towards justice in urban climate adaptation research. Nature Climate Change, 6(2), 131–137. https://doi.org/10.1038/nclimate2841

Striessnig, E., Lutz, W., & Patt, A. G. (2013). Effects of Educational Attainment on Climate Risk Vulnerability. Ecology and Society, 18(1), art16. https://doi.org/10.5751/ES-05252-180116

Tierney, K. J. (2007). From the Margins to the Mainstream? Disaster Research at the Crossroads. Annual Review of Sociology, 33(1), 503–525. https://doi.org/10.1146/annurev.soc.33.040406.131743

3.6. W6: Prisoner's Dilemma and Tragedy of the Commons

This session explores key theoretical frameworks in environmental social science, such as the Prisoner's Dilemma and the Tragedy of the Commons, which explain the challenges of collective action and resource management in the context of climate change.

Key concepts

- Prisoner's Dilemma
- Tragedy of the Commons
- Collective Action
- Common-Pool Resources

After completing this session, you should:

- Understand the theoretical frameworks of the Prisoner's Dilemma and Tragedy of the Commons.
- Be able to evaluate the challenges of collective action in managing common-pool resources.
- Assess governance and policy approaches to overcoming dilemmas in environmental management.

Key readings

Hardin, G. (1968). The Tragedy of the Commons. Science, 162(3859), 1243–1248. https://doi.org/10.2307/1724745

Dietz, T., Ostrom, E., & Stern, P. (2003). The Struggle to Govern the Commons. Science, 302(5652), 1907–1912. https://doi.org/10.1126/science.1091015

Olson, M. (1971). The logic of collective action: Public goods and the theory of groups. Harvard Univ. Press. Chapters 1-2.

Additional Readings:

Barclay, P. (2004). Trustworthiness and Competitive Altruism Can also Solve the "Tragedy of the Commons". Evolution and Human Behavior, 25(4), 209–220. https://doi.org/10.1016/j.evolhumbehav.2004.04.002

Fairbrother, M., Johansson Sevä, I., & Kulin, J. (2019). Political trust and the relationship between climate change beliefs and support for fossil fuel taxes: Evidence from a survey of 23 European countries. Global Environmental Change, 59, 102003. https://doi.org/10.1016/j.gloenvcha.2019.102003

Fehr, E., & Gintis, H. (2007). Human Motivation and Social Cooperation: Experimental and Analytical Foundations. Annual Review of Sociology, 33(1), 43–64. https://doi.org/10.1146/annurev.soc.33.040406.131812

Fehrler, S., & Przepiorka, W. (2016). Choosing a partner for social exchange: Charitable giving as a signal of trustworthiness. Journal of Economic Behavior & Organization, 129, 157–171. https://doi.org/10.1016/j.jebo.2016.06.006

Goldstein, N. J., Cialdini, R. B., & Griskevicius, V. (2008). A Room with a Viewpoint: Using Social Norms to Motivate Environmental Conservation in Hotels. Journal of Consumer Research, 35(3), 472–482. https://doi.org/10.1086/586910

Liebe, U., Preisendörfer, Peter., & Meyerhoff, J. (2010). To Pay or Not to Pay: Competing Theories to Explain Individuals' Willingness to Pay for Public Environmental Goods. Environment and Behavior, 43(1), 106–130. https://doi.org/10.1177/0013916509346229

Van Lange, P. A. M., & Rand, D. G. (2022). Human Cooperation and the Crises of Climate Change, COVID-19, and Misinformation. Annual Review of Psychology, 73(1), 379–402. https://doi.org/10.1146/annurev-psych-020821-110044Simpson, B., & Willer, R. (2015). Beyond Altruism: Sociological Foundations of Cooperation and Prosocial Behavior. Annual Review of Sociology, 41(1), 43–63. https://doi.org/10.1146/annurev-soc-073014-112242

Willer, R. (2009). Groups Reward Individual Sacrifice: The Status Solution to the Collective Action Problem. American Sociological Review, 74(1), 23–43. https://doi.org/10.1177/000312240907400102

3.7. W7: Policies and Institutions

This session examines the role of national and international policies and institutions in addressing

climate change. It covers global agreements like the Paris Agreement, the role of national institutions, and the design of policy instruments.

Key concepts

- Climate Policy
- Revenue Recycling
- Nudging & Default Options

After completing this session, you should:

- Understand the role of national and international policies and institutions in addressing climate change.
- Be familiar with climate agreements like the Paris Agreement and policy instruments like revenue recycling and nudging.
- Assess how different policy frameworks shape national and global climate responses.

Key readings

Bayer, P., & Aklin, M. (2020). The European Union Emissions Trading System reduced CO 2 emissions despite low prices. Proceedings of the National Academy of Sciences, 117(16), 8804–8812. https://doi.org/10.1073/pnas.1918128117

Bechtel, M. M., Genovese, F., & Scheve, K. F. (2019). Interests, Norms and Support for the Provision of Global Public Goods: The Case of Climate Co-operation. British Journal of Political Science, 49(4), 1333–1355. https://doi.org/10.1017/S0007123417000205

Liebe, U., Gewinner, J., & Diekmann, A. (2021). Large and persistent effects of green energy defaults in the household and business sectors. Nature Human Behaviour. https://doi.org/10.1038/s41562-021-01070-3

Additional Readings:

Bättig, M. B., & Bernauer, T. (2009). National Institutions and Global Public Goods: Are Democracies More Cooperative in Climate Change Policy? International Organization, 63(2), 281–308. https://doi.org/10.1017/S0020818309090092

Bechtel, M. M., & Scheve, K. F. (2013). Mass support for global climate agreements depends on institutional design. Proceedings of the National Academy of Sciences, 110(34), 13763–13768. https://doi.org/10.1073/pnas.1306374110

Beiser-McGrath, L. F., & Bernauer, T. (2019). Could revenue recycling make effective carbon taxation politically feasible? Science Advances, 5(9), eaax3323. https://doi.org/10.1126/sciadv.aax3323

Bakaki, Z., & Bernauer, T. (2017). Citizens show strong support for climate policy, but are they also willing to pay? Climatic Change, 145(1–2), 15–26. https://doi.org/10.1007/s10584-017-2078-x

Bernauer, T. (2013). Climate Change Politics. Annual Review of Political Science, 16(1), 421–448. https://doi.org/10.1146/annurev-polisci-062011-154926

Bernauer, T., & Koubi, V. (2009). Effects of political institutions on air quality. Ecological Economics, 68(5), 1355–1365. https://doi.org/10.1016/j.ecolecon.2008.09.003

Franzen, A., & Mader, S. (2016). Predictors of national CO2 emissions: Do international commitments matter? Climatic Change, 139(3–4), 491–502. https://doi.org/10.1007/s10584-016-1795-x

Green, J. F. (2021). Does carbon pricing reduce emissions? A review of ex-post analyses. Environmental Research Letters, 16(4), 043004. https://doi.org/10.1088/1748-9326/abdae9

Keohane, R. O., & Victor, D. G. (2016). Cooperation and discord in global climate policy. Nature Climate Change, 6(6), 570–575. https://doi.org/10.1038/nclimate2937

3.8. W8: Attitudes and Behaviour

This session focuses on the psychological and sociological factors that influence individual and collective attitudes and behaviors towards climate change. It discusses barriers to behavior change, environmental values, and the link between the two.

Key concepts

- Environmental Attitudes
- Behaviour Change
- Psychological Distance

After completing this session, you should:

- Understand the psychological and sociological factors influencing environmental attitudes and behaviors.
- Be able to assess barriers to behavior change related to climate action and the role of psychological distance.
- Recognize strategies to promote pro-environmental behaviors and how social norms influence climate actions.

Key readings

Bouman, T., Verschoor, M., Albers, C. J., Böhm, G., Fisher, S. D., Poortinga, W., Whitmarsh, L., & Steg, L. (2020). When worry about climate change leads to climate action: How values, worry and personal responsibility relate to various climate actions. Global Environmental Change, 62, 102061. https://doi.org/10.1016/j.gloenvcha.2020.102061

Lübke, C. (2022). Socioeconomic Roots of Climate Change Denial and Uncertainty among the European Population. European Sociological Review, 38(1), 153–168. https://doi.org/10.1093/esr/jcab035

Rüttenauer, T. (2024). More talk, no action? The link between exposure to extreme weather events, climate change belief and pro-environmental behaviour. European Societies, 26(4), 1046–1070. https://doi.org/10.1080/14616696.2023.2277281

Additional Readings:

Best, H., & Kneip, T. (2011). The impact of attitudes and behavioral costs on environmental behavior: A natural experiment on household waste recycling. Social Science Research, 40(3), 917–930. https://doi.org/10.1016/j.ssresearch.2010.12.001

Bruderer Enzler, H., & Diekmann, A. (2019). All talk and no action? An analysis of environmental concern, income and greenhouse gas emissions in Switzerland. Energy Research & Social Science, 51, 12–19. https://doi.org/10.1016/j.erss.2019.01.001

Bush, S. S., & Clayton, A. (2023). Facing Change: Gender and Climate Change Attitudes Worldwide. American Political Science Review, 117(2), 591–608. https://doi.org/10.1017/S0003055422000752

Franzen, A., & Bahr, S. (2024). The development of global environmental concern during the last three decades. Current Research in Environmental Sustainability, 8, 100260. https://doi.org/10.1016/j.crsust.2024.100260

Franzen, A., & Vogl, D. (2013). Two decades of measuring environmental attitudes: A comparative analysis of 33 countries. Global Environmental Change, 23(5), 1001–1008. https://doi.org/10.1016/j.gloenvcha.2013.03.009

Hoffmann, R., Muttarak, R., Peisker, J., & Stanig, P. (2022). Climate change experiences raise environmental concerns and promote Green voting. Nature Climate Change, 12(2), 148–155. https://doi.org/10.1038/s41558-021-01263-8

Kulin, J., Johansson Sevä, I., & Dunlap, R. E. (2021). Nationalist ideology, rightwing populism, and public views about climate change in Europe. Environmental Politics, 30(7), 1111–1134. https://doi.org/10.1080/09644016.2021.1898879

Mayerl, J., & Best, H. (2019). Attitudes and behavioral intentions to protect the environment: How consistent is the structure of environmental concern in cross-national comparison? International Journal of Sociology, 49(1), 27–52. https://doi.org/10.1080/00207659.2018.1560980

Jenkins-Smith, H. C., Ripberger, J. T., Silva, C. L., Carlson, D. E., Gupta, K., Carlson, N., Ter-Mkrtchyan, A., & Dunlap, R. E. (2020). Partisan asymmetry in temporal stability of climate change beliefs. Nature Climate Change, 10(4), 322–328. https://doi.org/10.1038/s41558-020-0719-y

Spence, A., Poortinga, W., & Pidgeon, N. (2012). The psychological distance of climate change. Risk Analysis, 32(6), 957–972. https://doi.org/10.1111/j.1539-6924.2011.01695.x

3.9. W9: Public Opinion and Social Movements

This session explores how public opinion is shaped by climate change communication and the role of social movements in advocating for climate action.

Key concepts

- Public Opinion
- Activism
- Social Movements

After completing this session, you should:

- Understand how public opinion on climate change is shaped by communication, media, and framing.
- Be able to evaluate the role of social movements in advocating for climate action and influencing policy.
- Recognize the impact of activism on public perception and policymaking in climate change.

Key readings

Lubell, M., Vedlitz, A., Zahran, S., & Alston, L. T. (2006). Collective action, environmental activism, and air quality policy. Political Research Quarterly, 59(1), 149–160. https://doi.org/10.1177/106591290605900113

Borbáth, E., & Hutter, S. (2024). Environmental protests in Europe. Journal of European Public Policy, 1–26. https://doi.org/10.1080/13501763.2024.2390701

De Kleer, D., Van Teutem, S., & De Vries, C. E. (2024). Public Support for Pro-Climate and Counter-Climate Protests. Working Paper. https://doi.org/10.31219/osf.io/z7uvt

Additional Readings:

Barrie, C., Fleming, T. G., & Rowan, S. S. (2024). Does Protest Influence Political Speech? Evidence from UK Climate Protest, 2017–2019. British Journal of Political Science, 54(2), 456–473. https://doi.org/10.1017/S0007123423000376

Hartmann, J., & Preisendörfer, P. (2023). The relationship between ecology and economy in German public opinion, 1984–2019. Environmental Politics, 1–20. https://doi.org/10.1080/09644016.2023.2178358

Mildenberger, M., & Leiserowitz, A. (2017). Public opinion on climate change: Is there an economy–environment tradeoff? Environmental Politics, 26(5), 801–824. https://doi.org/10.1080/09644016.2017.1322275

Nisbett, N., Spaiser, V., Leston-Bandeira, C., & Valdenegro, D. (2024). Climate action or delay: The dynamics of competing narratives in the UK political sphere and the influence of climate protest. Climate Policy, 1–14. https://doi.org/10.1080/14693062.2024.2398169

Valentim, A. (2023). Repeated Exposure and Protest Outcomes: How Fridays for Future Protests Influenced Voters. Working paper. https://doi.org/10.31235/osf.io/m6dpg

Wappenhans, T., Valentim, A., Klüver, H., & Stoetzer, L. F. (2024). Extreme weather events do not increase political parties' environmental attention. Nature Climate Change, 14(7), 696–699. https://doi.org/10.1038/s41558-024-02024-z

Simpson, B., Willer, R., & Feinberg, M. (2022). Radical flanks of social movements can increase support for moderate factions. PNAS Nexus, 1(3), pgac110. https://doi.org/10.1093/pnasnexus/pgac110

3.10. W10: Distributional Aspects of Climate Change

This session addresses the uneven distribution of environmental hazards and climate change impacts across population groups. It covers issues like global climate justice, national environmental inequalities and the role of residential sorting mechanisms.

Key concepts

- Climate Justice
- Environmental Inequality
- Residential Sorting

After completing this session, you should:

- Understand the uneven distribution of climate impacts across different population groups and regions.
- Be able to assess issues of climate justice, environmental inequality, and how residential sorting mechanisms play a role.
- Evaluate the ethical and policy challenges related to addressing these distributional aspects at both global and national levels.

Key readings

Crowder, K., & Downey, L. (2010). Inter-Neighborhood Migration, Race, and Environmental Hazards: Modeling Micro-Level Processes of Environmental Inequality. American Journal of Sociology, 115(4), 1110–1149. https://doi.org/10.1086/649576

Rüttenauer, T. (2018). Neighbours Matter: A Nation-wide Small-area Assessment of Environmental Inequality in Germany. Social Science Research, 70, 198–211. https://doi.org/10.1016/j.ssresearch.2017.11.009

Sikarwar, A., & Golaz, V. (2024). Substantial increase in population exposure to multiple environmental burdens in sub-Saharan Africa (2000-2019). Environmental Research Letters, 19(4), 044068. https://doi.org/10.1088/1748-9326/ad376b

Additional Readings:

Banzhaf, H. S., Ma, L., & Timmins, C. (2019). Environmental Justice: Establishing Causal Relationships. Annual Review of Resource Economics, 11(1), 377–398. https://doi.org/10.1146/annurev-resource-100518-094131

Christensen, P., & Timmins, C. (2022). Sorting or Steering: The Effects of Housing Discrimination on Neighborhood Choice. Journal of Political Economy, 130(8), 2110–2163. https://doi.org/10.1086/720140

Diffenbaugh, N. S., & Burke, M. (2019). Global warming has increased global economic inequality. Proceedings of the National Academy of Sciences, 116(20), 9808–9813. https://doi.org/10.1073/pnas.1816020116

König, C. (2024). Neighbourhood structure and environmental quality: A fine-grained analysis of spatial inequalities in urban Germany. Urban Studies, 61(10), 1968–1989. https://doi.org/10.1177/00420980231224224

Hsu, A., Sheriff, G., Chakraborty, T., & Manya, D. (2021). Disproportionate exposure to urban heat island intensity across major US cities. Nature Communications, 12(1), 2721. https://doi.org/10.1038/s41467-021-22799-5

Mohai, P., & Saha, R. (2015). Which Came First, People or Pollution? A Review of Theory and Evidence from Longitudinal Environmental Justice Studies. Environmental Research Letters, 10(12), 125011. https://doi.org/10.1088/1748-9326/10/12/125011

Mohai, P., & Saha, R. (2015). Which Came First, People or Pollution? Assessing the Disparate Siting and Post-Siting Demographic Change Hypotheses of Environmental Injustice. Environmental Research Letters, 10(11), 115008. https://doi.org/10.1088/1748-9326/10/11/115008

Van Den Brekel, L., Lenters, V., Mackenbach, J. D., Hoek, G., Wagtendonk, A., Lakerveld, J., Grobbee, D. E., & Vaartjes, I. (2024). Ethnic and socioeconomic inequalities in air pollution exposure: A cross-sectional analysis of nationwide individual-level data from the Netherlands. The Lancet Planetary Health, 8(1), e18–e29. https://doi.org/10.1016/S2542-5196(23)00258-9

Zimm, C., Mintz-Woo, K., Brutschin, E., Hanger-Kopp, S., Hoffmann, R., Kikstra, J. S., Kuhn, M., Min, J., Muttarak, R., Pachauri, S., Patange, O., Riahi, K., & Schinko, T. (2024). Justice considerations in climate research. Nature Climate Change, 14(1), 22–30. https://doi.org/10.1038/s41558-023-01869-0

4. ASSESSMENT

You will be assessed for this module through …

A1) 50% - Essay of 2,000 words

- Literature review about a topic of the module - Summarise the existing research on a given topic and identify gaps in the literature.
- **Submission deadline: November 20th 2024 – 1:00pm**

A2) 50% - Essay of 2,000 words

- Research Proposal - Develop a research design that aims to close a gap in existing research. This can be based on secondary data or on an experimental research design.
- **Submission deadline: January 15th 2025 – 1:00pm**

Details of all assessments to be undertaken in the module.

Planning, time-management and the meeting of deadlines are part of the personal and professional skills expected of all students. For this reason, UCL expects students to submit all coursework by the published deadline date and time.

If a student experiences something, which prevents them from meeting a deadline that is sudden, unexpected, significantly disruptive and beyond their control, they should apply for an Extenuating Circumstances (EC) on Portico. If the request is accepted, the student may be granted an extension.

More information about Extenuating Circumstances can be found on the IOE Student Helpdesk site or in the Academic Manual Chapter 2: Student Support Framework.

Assessment Criteria
https://www.ucl.ac.uk/ioe/student-helpdesk/sites/ioe_student_helpdesk/files/ucl_assessment_criteria_for_taught_programmes_2022-23.pdf

4.1 Submission Details

Formatting

Your coursework should be in font size 12, 1.5 lines spacing, with page numbers, and reasonable margins.

Word count

The word count *includes* tables, figures, footnotes, and endnotes. **Your bibliography (or Reference List) is *not* included in the word count**. Appendices are also excluded from the word count and should only be used where absolutely necessary. Appendices are not necessarily read by the assessor and are not part of the assessed work; they are not a way to extend word length beyond the limit.

If an assessment is more than 10% over the total word count quoted in the assessment details, a penalty of up to 10 marks may be applied. Please see further information in the faculty word count policy.

Referencing

The UCL Social Research Institute uses the Harvard or author/date referencing style, see here.

All written assessments should include a bibliography (or reference list) at the end, listing *all* works cited in the essay. Works you have consulted but do not reference explicitly should *not* be included. For detailed guidance on how to reference different types of sources, see here.

Please also see the SRI 'Practical Guide to Referencing' in your Programme Handbook and on the programmes hub.

Assessment submission guidance

You must submit the electronic document via the Submission link available on Moodle. Please note that you will need to include a coversheet, which you can download from the Programme Hub page. Your mark and feedback cannot otherwise be uploaded. If necessary, students should refer to the submission guide on the Assessment Section of the module Moodle page for guidance on how to submit coursework. If you have problems uploading your work, please contact IT Services or the Module Administrator as appropriate.

4.2 Academic Integrity and Plagiarism

Writing assignments can be both an enjoyable and challenging experience. One aspect of writing that students often struggle with is plagiarism: the unacknowledged presentation of a person's thoughts, words, artefacts or software as though they were their own original work. It is even possible to plagiarise yourself if you are citing a work you submitted elsewhere. **Direct quotations**

from published or unpublished works (including internet sources) must always be clearly identified as such by being placed inside quotation marks, and a full reference to their source must be provided in the proper form, including the page reference. Equally, if a student summarises another person's ideas or judgements, they must refer to that person in the text, and include the work to which they have referred in the bibliography. Failure to observe these rules may result in an allegation of plagiarism.

Find out what plagiarism is and how to avoid here:
Guidelines about Plagiarism
References, Citations and avoiding Plagiarism

Please also read the **'Important module regulations'** section on the module Moodle page for information about the consequences of plagiarism.

Turnitin

The UCL Social Research Institute uses Turnitin, a text-matching software tool, to help students develop their own work in their own words, and also to scan for evidence of plagiarism. Turnitin produces a Similarity Report or Originality Score which provides a percentage that indicates how much of the work matches other sources e.g., other essays on the internet, webpages, journal articles and published books.

Students can obtain a Similarity Report on one occasion prior to the final submission to check for issues.

Guidance about submitting your work through Moodle with Turnitin

There is a Plagiarism and Academic Writing Moodle page available for you to use (no enrolment key is required; simply click 'Enrol me'). You can upload your work here before submitting it, in order to check for plagiarism and referencing. You will also find a lot of useful advice and guidance on this page.

Any student suspected of examination misconduct, plagiarism, self-plagiarism, collusion, falsification or any other form of academic misconduct, which is likely to give an unfair advantage to the candidate and/or affect the security of assessment and/or compromise the academic integrity of UCL will be investigated under the Examination Irregularities and Plagiarism procedures. If misconduct is found, students are likely to be failed for that assignment and/or module. Serious or

repeated offences may lead to failure of the whole year, suspension, or even expulsion. A breach of copyright or intellectual property laws may also lead to legal action.