Department of Geography

MPhil in Anthropocene Studies
MPhil in Holocene Climates

Two interlinked programmes of advanced study from the Department of Geography, offering theoretical, analytical and practical skills for understanding how climates have changed in the past, and for exploring the possibilities of human influence over earthly futures.

Photo: Patrick Robert Doyle
MPhil in Anthropocene Studies

An 11-month course studying, exploring and critiquing the idea of The Anthropocene

The MPhil in Anthropocene Studies from the Department of Geography commenced in October 2020 and applications for 2022/23 will open in September 2021.

The scale of the environmental and social challenges facing today's world has grown enormously in recent decades, and will grow greater still in a world of scarce and unequal resources, growing population and unmet human development needs. The claim that we now live in The Anthropocene raises fundamental questions for and about humanity on a changing planet. This 11-month programme of advanced study and research will allow students to understand the origins, claims and politics of The Anthropocene, drawing upon the distinctive interdisciplinary strengths of geographical thought, analysis and practice.
About the MPhil

This MPhil provides students with the necessary knowledge and skills to study, explore and critique the implications, tensions and challenges inherent in the idea of The Anthropocene: What does it mean for humanity to be considered a geological force? How might this change how people think about the environment, themselves and their actions in the world? How can the sciences, social sciences and humanities each contribute towards understanding the 'grand challenges' that The Anthropocene signifies? Who might promote, and who might resist, this proposed nomenclature signifying 'the age of humans'?

The MPhil is taught by academic staff in the Department of Geography, one of the world's leading and most respected geography departments.

Who should apply, and why

Taking an interdisciplinary approach, the MPhil is designed to accommodate students with a wide range of first degrees and is open to international, EU and UK students. You should have a substantial background in geography, environmental studies or one of several related disciplines (e.g. Anthropology, Archaeology, Political Science, Development Studies, Sociology, Environmental Science, Environmental Studies, Human Sciences, Philosophy, English, History) and you should have a good first degree (i.e., a UK first-class or very good upper-second class Honours Degree, or equivalent international qualification).

"There are many ways in which one could scrutinise the many-sided and contested idea of The Anthropocene. Geography is a recognised interdiscipline that accommodates and uses, creatively and critically, multiple ways of knowing the world and how humans experience and shape it. Geography is therefore ideally placed to offer a holistic Master’s programme in Anthropocene Studies."

Mike Hulme
Professor of Human Geography
Course Director: MPhil Anthropocene Studies
MPhil in Holocene Climates

An 11-month course examining and explaining the histories of natural climate variation during the Holocene.

In October 2020 The Department of Geography launched an interdisciplinary MPhil in Holocene Climates, exploring and studying the material records of past climate variation. Applications for 2022/23 will open in September 2021.

Climate occupies an uncomfortable place in historical enquiry. When studying the recent millennia, rich in documentary and archaeological sources, most historians and archaeologists have been reluctant to consider natural climatic change as a factor in understanding political, economic, social and cultural transformation. Much of the scholarship, and many educational programmes, addressing these complex relationships continues to be constrained by the disciplinary limits of individuals. This MPhil Programme of advanced study and research brings into focus a more integrated view of the climates of the Holocene and their interactions with ecological and social systems, at a multitude of spatial and temporal scales.
About the MPhil

The MPhil in Holocene Climates will offer students expertise at the interface of climate and history in a new way, beginning with the premise that exchange and dialogue across disciplinary and epistemological divides must become habitual practice. Through its focus on the generation, interpretation and integration of different forms and lines of evidence, this programme will move beyond reductionist explanations to address critical questions: How and why has climate varied during the Holocene? How have such changes and subsequent environmental factors interacted with ecological and societal processes and systems? What can be learned from the past that may be of relevance for coping with future climate change?

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Who should apply, and why

The programme will enhance careers both inside and outside the academy, in both public and private sectors, in national and international organisations, and in developed and developing world contexts. It is designed to accommodate students with a wide range of first-degree backgrounds (e.g. Environmental and Earth Sciences, Geography, Geology, Natural Sciences) and is open to international, EU and UK students.

You should apply to this MPhil if you are interested in the history of climate change and of humanity over the course of the Holocene, and are keen to explore the implications of this history for the modern world. It will equip you to think across disciplines and to approach evidence critically.

“With its academic expertise, sub-disciplinary breadth and state-of-the-art laboratory infrastructure, Cambridge’s Department of Geography offers a unique opportunity to address a multitude of interrelated questions associated with the entanglements of the volcano-climate-human nexus throughout the Holocene. Due to their conceptual understanding of the complexity of past climate variability and human history, geographers are in the pole position to reach out to other disciplines within the natural and social sciences and even the humanities.”

Ulf Büntgen
Professor of Environmental Systems
Course Director: MPhil Holocene Climates
Programme Structure
(specific topics subject to change and availability)

**MPhil in Anthropocene Studies**
Equips students to understand the environmental politics of the Anthropocene and its provocation to re-interpret and re-imagine relationships between humans, non-humans and physical processes, emphasising the cross-scale and cross-generational interactions between environmental, cultural, technological and ethical novelty.

**MPhil in Holocene Climates**
Equips students to understand the physical causes and ecological and societal consequences of past climatic changes from the end of the Last Ice Age until present, emphasising the role of dating precision within and between different proxy archives and the cross-disciplinary assessment of linkages between climate variability and human history.

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### Induction Topics

**Anthropocene Studies**
- Historicising Anthropocene
- Whose Anthropocene?
- Stories, myths & indigeneity
- Carbon politics
- Intergenerational ethics
- Governance & responsible innovation
- Climate engineering
- Disasters and attribution

**Interdisciplinary Concepts**
- Theories of knowledge
- The global imagination
- Time and periodisation Models
- Knowledge politics
- Planetary boundaries
- Human migration
- Land use & vegetation dynamics

**Holocene Climates**
- Dendroclimatography
- Volcanology
- Oceanography
- Ice core records
- Proxy reconstructions
- Model simulations
- Sea level changes
- Holocene climate variability
- Climate of the Common Era

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### Christmas Break

**Anthropocene (cont.)**
- Lively capital
- Novel ecosystems and rewilding
- Coastal designs
- Urban natures
- Good & bad Anthropocene(s)
- Writing the Anthropocene
- Exhibiting the Anthropocene
- The politics of the future

**Interdisciplinary Concepts (cont.)**
- Species diversity & range shifts
- Adaptation and mitigation
- Risk and critical physical geography
- Institutions

**Dissertation preparation supervisions**

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### Easter Break

**Holocene (cont.)**
- Geochronology and 14C dating
- Rapid climate change
- Climate forcing factors
- Internal climate variability
- Global carbon variability
- Anthropogenic climate change
- Detection and Attribution
- Calibration/verification trials

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Dissertation Residential
Dissertation Thesis
Features of the MPhils

The two programmes are comprised of lectures, seminars, methods practicals, laboratory practicals (Holocene Climates only), small-group seminars (Anthropocene Studies only), dissertation residential and a research dissertation.

Core Modules

Anthropocene Studies
The syllabus will cover the contested histories and politics of the Anthropocene idea, contemporary manifestations of the Anthropocene in innovation, environmental practice and creative representation, and the imaginative, ethical and political significance of the Anthropocene.

Holocene Climates
The syllabus includes critical review of the full suite of interpretations of the causes (volcanic eruptions, solar activity, changes in land use/land-cover, greenhouse gases) and consequences (ecological and societal) of natural and anthropogenic climate change as reconstructed from a wide range of proxy archives and simulated by climate models for most of the Holocene.

Interdisciplinary Concepts
The syllabus covers theories of knowledge from natural and social sciences, methods and institutions for organising and communicating knowledge across disciplines—such as models, assessments and narratives and interdisciplinary concepts such as resilience, co-production and planetary boundaries.
Course Components

Research Dissertation
A 15,000-word dissertation requires students to identify, design and independently execute a small, empirically grounded research study related to the course. Students will be supervised through the process from initial question identification through to the design and execution of research.

Dissertation Residential
The Dissertation Residential consists of an intense few days of individual and group learning, focused on developing the dissertation proposal, poster and oral presentations.

Social Science Research Methods (ESRC recognized)
Students will complete a range of research methods courses, selecting from qualitative and quantitative research methods, and from basic training to advanced statistical analysis.

Small-group seminars (Anthropocene Studies)
Regular small-group seminars will take place during term-time, allowing students to read together and then to think and discuss critically through a number of core texts relating to the Anthropocene.

Natural Science Laboratory Classes (Holocene Climates)
Regular laboratory classes will take place during term-time, allowing students to become familiar with different proxy data and then to work through a small number of methodological challenges associated with the reconstruction of Holocene climate variability.

Graduate Training Programme
The Department also offers Graduate training workshops, which develop important research, presentation, publication and employment skills. Students are additionally encouraged to attend the lectures, research seminars, workshops and small-group seminars that make the Department a lively centre of intellectual activity.
Endorsements

Anthropocene Studies

“If ever there was a topic that warranted something akin to a ‘liberal arts’ treatment spanning natural science, social science and the humanities this is it.”

Professor Noel Castree,
University of Manchester, UK

“In a time of mounting environmental and socio-political distress, we certainly need young scholars who can critically reflect upon the entangled relationships between human and non-human worlds and bring questions of environmental ethics, virtue and care to academic, public and political life.”

Professor Eva Lövbrand
Linköping University, Sweden

Holocene Climates

“This syllabus will provide deep insights into the various issues of global climate change, past, present and future.”

Professor Jürg Luterbacher,
Justus Liebig University Giessen, Germany

“With its long-lasting tradition and current body of staff, Cambridge’s Department of Geography is in a unique position to offer world leading Masters Programmes.”

Professor Jan Esper,
Johannes Gutenberg University Mainz, Germany

How to apply:

Details of how to apply, deadlines, course requirements and programme details can be found at https://www.geog.cam.ac.uk/graduate/mphil/

For more information, please contact: anthropoceneholocene@geog.cam.ac.uk