Syllabus

Climate & History: Intersecting Science, Environment and Society

HIST BC 2xxx

Instructor: Prof. Angelo Matteo Caglioti

Class Description

Climate change poses an imminent threat to the future of humanity and is a crucial feature of the Anthropocene, namely the age of anthropogenic transformations of the Earth's environments on a global scale. How did we get here? History is fundamental to answer this question. This course examines the relationship between climate, scientific knowledge, and human societies. The class will first survey the role of climate as an historical actor of global history, rather than as the backdrop of political, social and economic events. In the second part of the course, we will examine the history of weather and climate science, as well as climate change denialism. The class offers a wide range of case studies around the world of the tight relationship between climate and history. The instructor encourages all majors to register from the humanities, social sciences, and natural sciences.

Class info

Meeting: ... Room: ...

Office Hours: ... or by appointment (acagliot@barnard.edu)

Learning Outcomes

- Understanding climate change from a historical and multifaceted perspective, in particular as an environmental, scientific, and political issue.
- Learning about the history of meteorology and climate science to understand the foundations of current debates about global warming, the production of scientific evidence, and climate change denialism.
- Learning about the role of climate in global history, namely how climate affected human societies over time.
- Developing a methodology across the natural and social sciences, by connecting the study of nature and society.

Readings

The class requires two textbooks. Other readings will be posted online.

Textbooks: Mike Hulme, Weathered: Cultures of Climate (London: Sage Publications, 2017)

Benjamin Lieberman and Elizabeth Gordon, *Climate Change in Human History: Prehistory to Present* (New York: Bloomsbury, 2018)

Optional readings to help you write the paper, especially helpful for not-history majors: Rampolla, "A pocket guide to writing history"

CLASS SCHEDULE

PART I:

What is Climate History? How Climate Influences History & History the Climate

• Week 1: Intro

Introduction: What is Climate? What is History?

Climate History

Readings:

Lieberman&Gordon, Intro; Chapter 1

• Week 2: Early Climate History

Pre-History and Antiquity

Readings:

Lieberman&Gordon, 2-3

Climate in the Middle Ages

Readinsg:

Lieberman&Gordon, Chapter 4

• Week 3: Little Ice Age Saga

The little Ice Age as Global Crisis:

Readings:

Lieberman&Gordon, Chapter 5

Parker, "Global Crisis: War, Climate Change and Catastrophe in the 17th century", excerpts

https://ebookcentral.proquest.com/lib/berkeley-

ebooks/detail.action?docID=3421144

Losers and Winners of the Little Ice Age: the Ottomans and the Dutch Readings:

Sam White, "The Climate of Rebellion the Early Modern Ottoman Empire", excerpts:

Chapter 1: "Region, Resources, Settlement"

Chapter 6: "The Great Drought"

Chapter 11: "Provisioning and Commerce"

https://www.fulcrum.org/concern/monographs/4x51hj76w?locale=en

Dagomar Degroot, "The Frigid Golden Age", excerpts:

Introduction (pp. 1-21)

Chapter 3: "Sailing, Floating, Riding and Skating through a Cooler Europe", pp. 109-131 & 147-149.

Chapter 6: "Tracing and Painting in the Little Ice Age", pp. 253-254 & 263-276. https://www.cambridge.org/core/books/frigid-golden-age/FD88D1B4AFA571C02A33D34B65484928

• Week 4: The New World

The little Ice Age and the Exploration of America

Reading:

Sam White, "A Cold Welcome. The Little Ice Age and Europe's Encounter with North America", excerpts:

Introduction

Chapter 6: "Destroyed with Cruel Disease"

Chapter 8: "Winter for Eight Months and Hell for Four"

Hurricanes and the Caribbean

Readings:

Stuart Schwartz, "A History of Hurricanes in the Greater Caribbean from Columbus to Katrina" (excerpts)

https://muse.jhu.edu/book/36465/

• Week 5: Transformations

Climate and Colonialism

Readings:

Davis, "Late Victorian Holocausts. El Niño Famines and the making of the Third World" (excerpts)

https://www.fulcrum.org/concern/monographs/cz30pt14c

Energy, Fossil Fuel, and the Industrial Revolution

Readings: Lieberman&Gordon, Chapter 6

Andreas Malm, "Fossil Capital: the Rise of Steam-Power and the Roots of Global Warming" (excerpts on bCourses)

• Week 6: Great Transformations

The Pollution of the Atmosphere

Readings:

John R. McNeill, "Something New Under the Sun. An Environmental History of the Twentieth Century", Chapter 3 ("The Atmosphere: Urban History") and 4 ("The Atmosphere: Regional and Global History")

The Great Acceleration, Consumerism, and Global Waste

Readings:

John R. McNeill, "The Great Acceleration: An Environmental History of the Anthropocene since 1945" (Excerpts)

MIDTERM PART II: "How do we know the climate?"

• Week 7: Intro

What is climate?

Reading: Hulme, Chapter 1-2

Knowing Climate in Antiquity

Readings:

Hulme, Chapter (stop at p. 35)

Clarence Glacken, "Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century", Chapter 2: "Air, Waters, Places. Greek Sources of the Environmental Theory", pp. 80-100

• Week 8: Climate and Empire

The Puzzle of the American Climate

Readings:

Karen Kuppermn, "The Puzzle of the American Climate in the Early Colonial Period, The American Historical Review, v. 87, n. 5 (Dec. 1982), pp. 1262-1289 https://www.jstor.org/stable/1856913

Acclimatization and Empire

Readings:

Osborne, "Acclimatizing the World"

https://www.jstor.org/stable/301945?seq=1#metadata info tab contents Deborah Coen, "Imperial Climatographies from Tyrol to Turkestan" https://www.journals.uchicago.edu/doi/full/10.1086/661264

• Week 9: Meteorology and the Enlightenment

Humboldtian Science

Readings:

Gregory Cushman, "Humboldtian Science, Creole Meteorology, and the Discovery of Human-Caused Climate Change in South America" https://www.journals.uchicago.edu/doi/full/10.1086/661263

The Climate of the Enlightenment

Readings:

Jan Golinski, "British Weather and the Climate of Enlightenment", Chapters 2-3 https://ebookcentral.proquest.com/lib/berkeley-

ebooks/detail.action?docID=616037

Livingstone, "Race, Space and Moral Climatology" *Journal of Historical Geography*, 28, 2 (2002), 159-180.

• Week 10: What does the History of Climate Science Matter? Climate Change Denialism and Causation

Causation and Early Climate Science

Hulme, "Weathered", Chapter 4

Causation and Climate Change Denialism

Documentary Screening: "Merchants of Doubt"

• Week 11: The birth of Modern Meteorology

Victorians and the Weather

Readings:

Anderson, Katharine, *Predicting the Weather: Victorians and the Science of Meteorology*, Chicago: University of Chicago Press, 2005.

Introduction (pp. 1-14)

Chapter 3: "Weather in a Public Office" (pp. 83-130)

http://site.ebrary.com/lib/berkeley/Doc?id=10431283.

Meteorology, World War I and International Governance

Reading: Edwards, Paul N. "Meteorology as Infrastructural Globalism." *Osiris* 21, no. 1 (2006): 229–50. https://doi.org/10.1086/507143.

• Week 12: Climate Science at War

Meteorology and World War II

Readings:

James Fleming "Sverre Pettersen, the Bergen School, and the Forecasts for D-Day", in Proceedings of the International Commission on the History of Meteorology 1 (2004), pp. 75-83.

Cold War, Climate Engineering and the Vietnam War

Readings:

Fleming, James Rodger. *Fixing the Sky: The Checkered History of Weather and Climate Control*. New York: Columbia University Press, 2010 (excerpts)

MIDTERM PAPER DUE

• <u>Week 12: Climate Science and Social Change</u> Cold War, Nuclear Winter, and Environmentalism

Readings:

Hulme "Weathered" Chapter 10 "Redesigning Climate"

Matthias Dörres, "The Politics of Atmospheric Sciences: Nuclear Winter and Global Climate Change"

Melting Empires? Decolonization and Climate

Readings:

Adrian Howkins, "Melting Empires? Climate Change and Politics in Antarctica since the International Geophysical Year"

https://www.journals.uchicago.edu/doi/full/10.1086/661271

Week 13: Global Warming

The Discovery of Global Warming

Readings:

Spencer Weart, "The Discovery of Global Warming"

Excerpts

https://ebookcentral.proguest.com/lib/berkeley-

ebooks/detail.action?docID=3301406

Development and Global Warming

Readings:

Hulme "The Challenges of Development" from "Why we disagree about Climate Change"

• Week 15: History and Today

Climate Change Denialism

Readings:

Lieberman&Gordon, Chapter 7 ("The future is now")

Hulme Chapter 11 ("Governing Climate")

• Last day of Class (Recap)

Readings:

Hulme Chapter 12 ("Reading Future Climates")

Final: TBA

Graded Assignments

Midterm: 20% Paper: 30%

Participation: 15%

Final: 35%

Additional policies and information:

You will receive more instructions on the paper and midterm ahead of time. Re: the papers, you will select a topic from one of those listed from the course schedule and carry out some original research based on secondary sources. Plagiarism will not be tolerated. In short, you cannot use other people's work without acknowledgment, you cannot copy or paraphrase ideas, concepts and metaphors taken from others or the internet without appropriate reference. You also cannot submit papers or assignments produced for other classes. For further information, please refer to the *Barnard Honor Code*:

"We, the students of Barnard College, resolve to uphold the honor of the College by engaging with integrity in all of our academic pursuits. We affirm that academic integrity is the honorable creation and presentation of our own work. We acknowledge that it is our responsibility to seek clarification of proper forms of collaboration and use of academic resources in all assignments or exams. We consider academic integrity to include the proper use and care for all print, electronic, or other academic resources. We will respect the rights of others to engage in pursuit of learning in order to uphold our commitment to honor. We pledge to do all that is in our power to create a spirit of honesty and honor for its own sake. "established 1912, updated 2016."

Center for Accessibility Resources & Disability Services Statement

If you believe you may encounter barriers to the academic environment due to a documented disability or emerging health challenges, please feel free to contact me and/or the Center for Accessibility Resources & Disability Services (CARDS). Any student with approved academic accommodations is encouraged to contact me during office hours or via email. If you have questions regarding registering a disability or receiving accommodations for the semester, please contact CARDS at (212) 854-4634, cards@barnard.edu, or learn more at barnard.edu/disabilityservices. CARDS is located in 101 Altschul Hall.

Affordable Access to Course Texts Statement

All students deserve to be able to access course texts. The high costs of textbooks and other course materials prohibit access and perpetuate inequity, and Barnard librarians are partnering with students, faculty, and staff to increase access. By the first day of advance registration for each term, you should be able to view on CourseWorks information provided by your faculty about required texts (including ISBN or author, title, publisher and copyright date) and their prices. Once you have selected your classes, here are some cost-free methods for accessing course texts, recommended by the Barnard Library. I have placed the texts on reserve at Barnard Library, otherwise look for course texts using CLIO (library catalog), Borrow Direct (request books from partner libraries), Interlibrary Loan(request book chapters from any library), and NYPL. Students with financial need or insecurity can check items out from the FLIP lending libraries in the Barnard Library and Butler Library and can consult with the Dean of Studies and the Financial Aid Office about additional affordable alternatives for getting

access to course texts. Talk with your librarian and visit the Barnard Library Textbook Affordability guide(library.barnard.edu/textbook-affordability) for more details.

Class Attendance Policy

<u>Be punctual</u>: respect means also to be timely. I will tolerate up to 10 minutes of delay. If such delay becomes recurrent, it will affect your grade. Class discussion and participation are a fundamental component of this class. Do not miss class! Your grades will be affected. If needed, please justify your absence in advance.

Class Laptop Policy

I prefer that you do NOT use laptops in class during lecture, because it can be distracting. If you absolutely need to takes notes on your laptop, please ask permission.

Late assignments

Assignments that are overdue will not be accepted. Exceptions must be certified by medical evidence. If you have any specific concern about meeting a deadline for an assignment, you should contact me at least three days in advance for an extension.

HAVE A GREAT SEMESTER!