

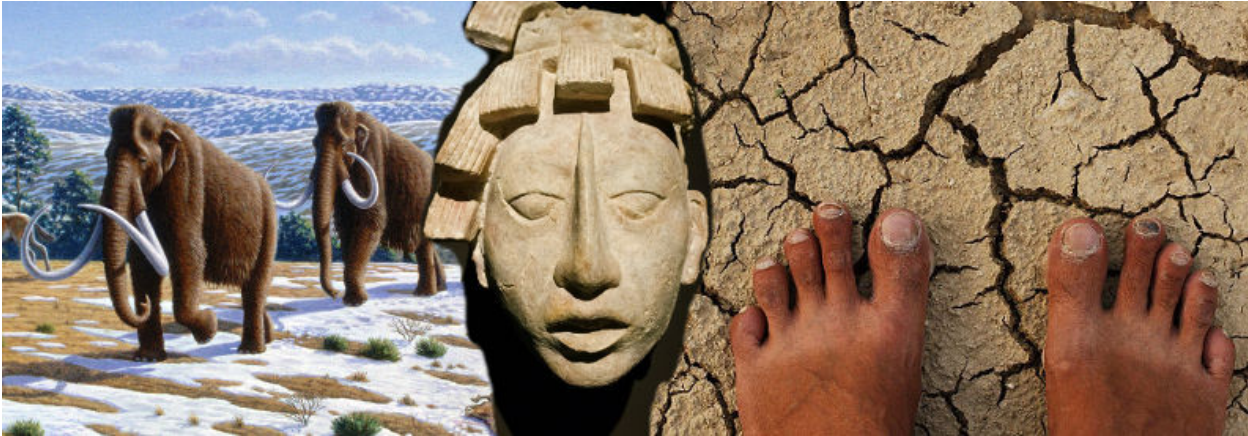
Climate Change in History

History 410 – CRN 42136

Summer 2015 (Session II)

M, T, W, Tr 10:00-11:50 AM

Lillis Hall 285



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Office hours: Mondays & Wednesdays, 1:00-2:00 PM (or by appointment)

LEARNING OBJECTIVES

Although climate change is the central environmental issue of modern times, it is nothing new. Significant changes to the climate of Earth, whether caused by natural or human processes (or a combination of both), have provided both challenges and opportunities to human societies for literally all of human history. Appreciation of the way in which climate change has affected world history is a necessary tool in understanding and dealing with contemporary issues of greenhouse gas warming. This course is intended as an introduction to these historical questions.

This course is intended to provide students with an overview of the implications of climate change through a broad scope of world history. From lectures, discussions and readings, students should expect to understand the following:

1. The basic outlines of several major events of climate change that have occurred in human history from the end of the Ice Age to the early 21st century.
2. How human societies have adapted—successfully and unsuccessfully—to challenges created by various climate change situations.
3. How and why the role climate change has played in the human past is contentious and unsettled, and why these questions matter.
4. The historical context necessary to evaluate the contemporary industrial-era process of anthropogenic climate change (greenhouse gas warming or, simply, global warming).

The scope of this course is very broad in both its geographic and temporal dimensions. We will be discussing climate change situations that have occurred in Europe, Asia and the Americas, from Greenland to Peru, and from the earliest human societies up until the year 2015. No previous historical (or scientific) basis or prerequisite is necessary to do well in this course.

ASSIGNMENTS AND EXPECTATIONS

Attendance and completion of course readings and assignments is expected. Active participation in class discussions of readings and issues is expected and highly encouraged.

Grades will be compiled on the basis of attendance and participation, two short papers based upon assigned readings for the course, a midterm (open-book, take-home) and an in-class final exam. Here are grade weights and details regarding assignments:

Attendance and participation in class discussions: 10%

“Reaction Papers” (2): 20% each

Students will write two short papers—3 pages, ~750 words each—each discussing and reacting to their choice of subsets of articles assigned for the course. No outside research will be necessary.

FIRST PAPER DUE: Monday, July 27

SECOND PAPER DUE: Monday, August 10

Midterm: 25%

A midterm will be administered electronically through Canvas and may be done at home. Students will be encouraged to consult readings and class materials (i.e., the test is open-book). The structure will likely involve some objective questions and some analytical essay questions. The midterm will be open and available to be completed likely for several days, but must be completed by the end of the day Monday, August 3.

Final Exam: 25%

An in-class final will be given during the scheduled final exam time, Thursday, August 13, 8:00 AM. The structure will likely involve some objective questions and some analytical essay questions.

Grading rubric:

A+: Work of unusual distinction.

A: Work that distinguishes itself by the excellence of its grasp of the material and the precision and insight of its argument, in addition to being well executed and reasonably free of errors.

B: Work that satisfies main criteria of the assignment, and demonstrates command of the material, but does not achieve the level of excellence that characterizes work of A quality.

C: Work that demonstrates a rudimentary grasp of the material and satisfies at least some of the assigned criteria.

D: Work that demonstrates a poor grasp of the material and/or is executed with little regard for college standards, but which exhibits some engagement with the material.

F: Work that is weak in every aspect, demonstrating a basic misunderstanding of the material and/or disregard for the assigned question.

This class is not graded on a curve.

Accessibility:

The University of Oregon works to create inclusive learning environment. Please notify me if there are aspects of the instruction or design of this course that result in disability-related barriers to your participation. You are also encouraged to contact the Accessible Education Center in 164 Oregon Hall at 541-346-1155 or uoac@uoregon.edu.

ASSIGNED MATERIALS, READINGS AND DAILY COURSE SCHEDULE

Class periods will involve a lecture component and a discussion component; discussions will be based primarily on readings. Please do the assigned reading prior to the class period under which it is listed.

Texts for Purchase: None. All assigned materials will be provided electronically via Canvas, usually in .PDF form. Some assigned materials are in video form.

Class 1: 7.20.15 (Monday): Introduction and Beginnings

What is this course about? What are some episodes of climate change that have happened in the non-human past? What was the Ice Age? What's the significance of the woolly mammoth?

ASSIGNED: Sedgwick, Caitlin. "What Killed the Woolly Mammoth?" *PLoS Biology*, Vol. 6, Issue 4 (2008), e99.

Class 2: 7.21.15 (Tuesday): Ancient Civilizations, Rome and "Dark Ages"

What role did climate change play in ancient Mycenae, Asia, and the Roman/post-Roman world?

ASSIGNED: Chew, Sing C. "From Harappa to Mesopotamia and Egypt to Mycenae: Dark Ages, Political-Economic Declines, and Environmental/Climatic Changes 2200 B.C.-700 B.C." *The Historical Evolution of World Systems*, ed. Christopher Chase-Dunn & E.N. Anderson (2005).

McCormick, Michael, Ulf Büntgen, et. al. "Climate Change During and After the Roman Empire: Reconstructing the Past from Scientific and Historical Evidence." *Journal of Interdisciplinary History*, XLIII:2 (Autumn 2012), 169. [short excerpt]

Class 3: 7.22.15 (Wednesday): Byzantium and the Maya

What was the great climate event of 535-36 CE? Is climate change responsible for the collapse of the classical Mayan civilization?

ASSIGNED: Fagan, Brian. *The Great Warming: Climate Change and the Rise and Fall of Civilizations*. New York: Bloomsbury Press, 2008, pp. 138-154 [Chapter 8, "Lords of the Water Mountains."]

Class 4: 7.23.15 (Thursday): The Medieval Warm Period

Did the world get warmer in the Middle Ages? Why does it matter?

ASSIGNED: Fagan, *The Great Warming*, pp. 1-21 [Chapter 1, “A Time of Warming.”]

Class 5: 7.27.15 (Monday): The Little Ice Age

What climate or climate-related events were occurring in the Middle Ages? Were glaciers growing during the early modern period? What were the implications?

ASSIGNED: Ladurie, Emmanuel le Roy. *Times of Feast, Times of Famine: A History of Climate Since the Year 1000*. Garden City, NJ: Doubleday & Company, Inc., 1971, pp. 7-17.

First Reaction Paper Due. (Reaction to one of the following readings: Sedgwick, Chew, McCormick, Fagan or Ladurie)

Class 6: 7.28.15 (Tuesday): The Problem of Greenland

Did Greenland really used to be green? Why is this a particularly contentious issue?

ASSIGNED: Fagan, *The Great Warming*, pp. 87-105 [Chapter 5, “Inuit and Qadlunaat.”]

Diamond, Jared. *Collapse: How Societies Choose to Fail or Succeed*. New York: Viking Press, 2005, pp. 266-276.

Class 7: 7.29.15 (Wednesday): Climate, the Enlightenment and Early America

What was the “Columbian Exchange?” Why did the Enlightenment jump-start people’s thinking about climate, and why did climate issues have special significance for Americans?

ASSIGNED: Fleming, James Rodger. *Historical Perspectives on Climate Change*. Oxford: Oxford University Press, 2005, pp. 11-19 [Chapter 1, “Climate and Culture in Enlightenment Thought.”]

Webster, Noah. “A Dissertation on the Supposed Change in the Temperature of Winter.” *Connecticut Academy of Arts and Sciences*, (1810) Vol. I. [excerpt]

Class 8: 7.30.15 (Thursday): The Cold Decade and Volcanic Climate Change

Why was there “no summer” in 1816, and how did people react to dramatic, short-term temporary climate change?

ASSIGNED: Munger, Sean. “1816: ‘The Mighty Operations of Nature’: Societal Effects of the Year Without a Summer.” *Madison Historical Review*, Vol. 10 (May 2013).

The online take-home midterm will likely open for access on this day.

Class 9: 8.3.15 (Monday): Laying the Groundwork for Modern Climate Science

What were the early underpinnings of scientific understanding of greenhouse gas warming?

Special guest Q&A: James Fleming (via teleconference)—**Please come with questions you’d like to ask him.**

ASSIGNED: Fleming, *Historical Perspectives*, pp. 65-74 [a portion of Chapter 6, “John Tyndall, Svante Arrhenius, and Early Research on Carbon Dioxide and Climate.”]

Online midterm will close late on this day.

Class 10: 8.4.15 (Tuesday): The Discovery of Global Warming

How, when and why did scientists discover that human activity, especially generation of carbon dioxide, was causing climate change?

ASSIGNED: Fleming, *Historical Perspectives*, pp. 111-128 [a portion of Chapter 9, “Global Warming?”]

Class 11: 8.5.15 (Wednesday): Implications of Greenhouse Gas Warming

How did the effects of anthropogenic climate change begin to be noticed in the mid-20th century? What happened in Peru in the 1940s and why is it important?

ASSIGNED: Carey, Mark. *In the Shadow of Melting Glaciers: Climate Change and Andean Society*. Oxford: Oxford University Press, 2010, pp. 19-44.

Class 12: 8.6.15 (Thursday): Global Warming Goes Mainstream

How did greenhouse gas warming make its way into public policy and popular consciousness at the end of the 20th century?

ASSIGNED: Intergovernmental Panel on Climate Change. *IPCC First Assessment Report (1990)* <http://www.ipcc.ch/ipccreports/1992%20IPCC%20Supplement/IPCC_1990_and_1992_Assessments/English/ipcc_90_92_assessments_far_overview.pdf>.

Class 13: 8.10.15 (Monday): Climate Change as a World Challenge

How did the challenges of greenhouse gas warming transform modern debates over sustainability, economics and geopolitics?

ASSIGNED: Intergovernmental Panel on Climate Change. “Fifth Assessment Synthesis Report” (2014). <https://youtu.be/F-Hcu3jH8G4> [video]

Intergovernmental Panel on Climate Change. “Climate Change 2013: The Physical Science Basis” (2013). <https://youtu.be/6yiTZm0y1YA> [video]

Intergovernmental Panel on Climate Change. “Climate Change 2014: Mitigation of Climate Change” (2014). <https://youtu.be/gDcGz1iVm6U> [video]

Second Reaction Paper Due. (Reaction to one of the following readings: Diamond, Webster, Carey, Munger or Mann)

Class 14: 8.11.15 (Tuesday): Denial and Politicization

Why is denial of anthropogenic climate change so prevalent? Where does it come from? How did climate change become a partisan political issue?

ASSIGNED: Mann, Michael. *The Hockey Stick and the Climate Wars*. New York: Columbia University Press, 2012, pp. xi-xvi, 63-73, 207-214.

Class 15: 8.12.15 (Wednesday): Wrap-Up and Review

What have we learned? How can we use what we’ve learned to inform the future?

ASSIGNED: None.

Final Exam: 8.13.15 (Thursday), 8:00 AM, Lillis Hall 285.

Final will be closed-book (possibly with some limited notes allowed), in-class exam.

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