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 you with an overview of the implications of climate change through a broad scope of world history. From lectures, discussions and readings, you should expect to be able to do the following:
1. Identify the basic common and contrasting issues raised by 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. Reflect critically upon how human societies have adapted—successfully and unsuccessfully—to challenges created by various climate change situations.
3. Understand how and why the role climate change has played in the human past is contentious and unsettled, and why these questions matter.
4. Place our contemporary industrial-era process of anthropogenic climate change (greenhouse gas warming or, simply, global warming) in its proper historical context.
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 2016. No previous historical (or scientific) basis or prerequisite is necessary to do well in this course.

**How This Course Works**

This course is conducted entirely online and will be offered between June 20 and August 14, 2016. The principal interface will be through Canvas (canvas.uoregon.edu).

There will be four to six video lecture components each week. Videos will average about fifteen to twenty minutes each in length. There will be a short quiz after each lecture to unlock the next one. These will be very simple quizzes that do not count for formal credit (you can go back and retake them as many times as necessary, for example).

There will also be assigned readings, delivered via Canvas, for each week. On a Canvas discussion board, I will post discussion questions pertaining to the readings. Students will need to create two responses for each reading—which can be either responding to a question I post about the reading, responding to another student’s response, or coming up with a topic of your own based on that reading. For a response to count, you must say something substantive, raise a substantive question, or participate meaningfully in a discussion. (Responses like “yes” or “I agree,” without more, won’t count for credit).

See the Assignments and Expectations section below for a more detailed explanation of how this works.

This is an online course, and is therefore self-paced, but do not confuse that with being self-directed. This is a real course with graded assignments and required reading. In addition to watching the video lectures, you should expect to spend several hours per week reading and discussing the assigned materials, in addition to the essays that will form much of your grade.

**Assignments and Expectations**

Your course grade will have three components: your discussion grade (33.3%), and the grades for two essay papers (each worth 33.3%). Details:

**Discussion on Canvas Forum:** 33.3%.

The discussion forum, in which we will discuss the assigned readings, is the heart of the course. Here’s where the dialogue will occur, not just between you and me, but between you and fellow students. I expect this discussion to be robust.

Each week, in the Discussions section of the Canvas site for our course, I will post a series of topics about the readings. It will be clear from the title of each topic which reading it refers to. For full participation, you will need to post at least two responses for each reading. Say
something substantive, raise a good question, or chime in with a meaningful response on another student’s comment. While I will not be counting words in your individual postings, you should expect to be generating about 250 words a week on the discussion forum.

Each week, for each student, there will be a **Discussion Grade**. I will grade based on quality of responses (letter grades only, no + or -) and give feedback.

- **A work**: Exceptionally engaged responses that consistently raise or answer substantive questions or demonstrate insight and understanding, beyond surface-level fact comprehension, of the reading and the issues raised by it.
- **B work**: Generally good responses indicating comprehension and engagement with the issues, but perhaps not grasping key insights, or what would otherwise be A work on some responses but not consistent.
- **C work**: Basic factual/rudimentary comprehension of the readings, but not really engaging with the argument or broader issues.
- **D work**: Barely passing—the number of responses is adequate, but they are non-substantive, “token” or otherwise seriously deficient.
- **F**—non- or incomplete participation (not meeting the posting minimum).

At the end of the course I will finalize your Discussion Grade for the course based on the aggregate of your weekly grades, and upon my assessment of your overall performance. (There may be +/- gradations in the final Discussion Grade).

**Essay Papers**: 33.3% each.

You will write two papers responding to essay questions (two per paper) about broad course themes. Your grade will be based in part upon how well you use the assigned readings to support your answers. No outside research will be necessary. You should expect to write about 2000 words total for these papers.

You’ll submit the papers by uploading them electronically on the Canvas site. More details on each of these papers will be released via Canvas well in advance of the deadlines. The papers are non-cumulative, meaning the second paper will only cover material since the first paper.

**First Paper Due**: Sunday, July 17 (end of Week 4)

**Second Paper Due**: Sunday, August 14 (end of Week 8)

**Grading rubric**:

This is the grading rubric for the essay papers and the final grade in the entire course. (Essay papers and final grades will have +/- gradations; only the individual weekly discussion grades will have pure letter grades).

- **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 uoaec@uoregon.edu.

Help, Feedback and Interaction

This is an online course, but I will be available to field questions, provide feedback, or discuss anything about the course in any way that works for you in a mutually agreeable format. If you wish to meet in person—probably the best way to get in-depth feedback—please email me at mmunger@uoregon.edu and we will set up a time to meet on campus.

Additionally, I plan to have “virtual office hours” where I will be continuously available online at a predetermined time, equivalent to in-person office hours (at least three hours a week) in a sit-down class. I will be live on the “Chat” function via Canvas, and I will also be live on Skype (where, if you also have Skype, voice communication will also be possible). You may also message me via email or on Canvas’s messaging system.

Assigned Materials, Readings and Weekly Course Schedule

I have broken down the course into eight units, each one corresponding to one week of the course. The major significance of the week structure is to tell you when the deadline is for papers and for you to post your responses in the discussion forum (and when I’ll begin grading them). Feel free to skip ahead (for example, if you finish Unit 2 on June 30 and want to go ahead and do Unit 3, you’re welcome to do that). I cannot promise all course materials will be online at the very beginning of the course—certainly the first two units will—but I’ll make them available as soon as I complete them.

Deadlines: I count the end of a week as Sunday, 11:59 PM.

Texts for Purchase: None. All assigned materials will be provided electronically via Canvas, usually in .PDF form. Some assigned materials are in video form.
Unit 1: Ice Ages and Ancient Worlds (Week of 6.20 to 6.26)
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? What’s a “Dark Age”? What role did climate change in the history of the Ancient Near East?

Videos 1 through 5
Assigned Readings:

Unit 2: Rome, Mesoamerica and the Early Middle Ages (Week of 6.27 to 7.3)
What role did climate change play the Roman and post-Roman world? Who were the Maya and why was their civilization uniquely susceptible to the problems of climate change? Did the world get warmer in the early Middle Ages, and why does it matter? What is “climate determinism?”

Videos 6 through 10
Assigned Readings:

Unit 3: Greenland and the Little Ice Age (Week of 7.4 to 7.10)
Did Greenland really used to be green? Why is what happened in Greenland so difficult to figure out, and why is it so contentious? What climate or climate-related events were occurring in the later Middle Ages? What was the Black Death, why was it such a horrifying disaster, and was it climate related?

Videos 11 through 14
Assigned Readings:
- Saga of Erik the Red. Online: http://sagadb.org/eiriks_saga_rauda.en
- Lamb, “Climate and Life During the Middle Ages, Studied Especially in the Mountains of Europe,” in Weather, Climate & Human Affairs, pp. 40-74.
Unit 4: A New World (Week of 7.11 to 7.17)
What implications did the “discovery” of the Americas by Europeans have? What was the “Columbian Exchange”? What climate conditions did Europeans expect when they got to the New World, and what did they actually find? Why is the Enlightenment so crucial to the development of anthropogenic global warming? Why did climate issues have special significance for Americans?

Videos 15 through 19

Assigned Readings:

First Paper Due: 7.17, 11:59 PM

Unit 5: Century of Climate: The 19th Century (Week of 7.18 to 7.24)
Why was there “no summer” in 1816, and how did people react to dramatic, short-term temporary climate change? Why was the Victorian Era crucial for the development of both climate science and the processes that created anthropogenic global warming?

Videos 20 through 24

Assigned Readings:
- Fleming, James Rodger, Historical Perspectives on Climate Change, Chapter 6 [excerpt], pp. 65-74, Chapter 9 [excerpt], pp. 111-128.

Unit 6: Global Warming Begins (Week of 7.25 to 7.31)
How was the greenhouse effect discovered and ultimately linked to carbon dioxide emissions by human activity? How and why was “Big Science” the cradle of discovery of global warming, especially in the United States? What is the role of environmentalism in the public and policymakers “discovering” global warming?

Videos 25 through 29

Assigned Readings:


**Unit 7: Global Warming as a World Challenge (Week of 8.1 to 8.7)**

How has globalization affected climate change (and vice-versa)? What is the ozone layer issue and how does it relate to global warming? What are the conceptual underpinnings of international efforts to combat global warming?

**Videos 30 through 34**

**Assigned Readings:**


**Unit 8: The Climate Change Controversy (Week of 8.8 to 8.14)**

How did global warming become a political issue? Why do some people deny the scientific reality of anthropogenic climate change? What’s new about Pope Francis’s approach? What have we learned? Where do we go from here?

**Videos 35 through 37, plus UQx Denial 101 Videos and James Hansen “Ice Melt, Sea Level Rise and Superstorms Video Abstract.”**

**Assigned Readings:**

- Exxon Climate Change documents.
- Hansen, James, “Ice Melt, Sea Level Rise and Superstorms: The Threat of Irreparable Harm.” *Climate Science, Awareness and Solutions*, Earth Institute, Columbia University [online], March 2016.

**Second (Final) Paper Due, 8.14, 11:59 PM.**