

HIS 4930-09: CLIMATE AND HISTORY

***Fall 2011, Mondays and Wednesdays 3:30-4:45 pm
HCB 314***

Instructor: Andy Bruno

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Office hours: Tuesday 2:00-4:00 pm, or by appointment

Course description

This course explores the ways that climate and human beings have affected each other from the deep past to the present. Using the tools of environmental history, we will begin millennia ago and look at how climatic patterns influenced human populations, their dispersal, and their occupational activities. We will then consider the period of the Little Ice Age and how a colder climate interacted with economic and cultural developments in different parts of the world. We will also analyze the complex political and social ramifications of climatic phenomena such as the explosion of Mount Tambora in 1815, El Niño events in the late nineteenth century, and glacial melting in the twentieth century. We will conclude with an examination of the history of modern meteorology and climate science, in particular how researchers came to understand the process of human-induced climate change.

This course will be conducted as a lecture/discussion class. The instructor will present material related to the reading for the day and facilitate student discussion of issues and problems that emerge from the reading and lectures. Students should come ready to engage with questions about the role of climate in human history.

Course objectives

Students will:

- Identify and explain some of the ways that humans and climatic phenomena have influenced each other in the past in written assignments and class discussion.
- Follow and evaluate historical and scientific arguments from the readings in responses to questions posed by the instructor.
- Compose analytic essays that are well structured and well written.
- Apply their evaluations of a historical argument to a new, specific context in a written assignment.
- Recall general information about changes in the earth's climate and human interaction with it over the past 20,000 years during class sessions and in quizzes.

Books for purchase

The following books are available for purchase at the bookstore. You must possess copies of the required books and bring them to class. Copies of most of the books are on reserve at Strozier Library. You also may be able to borrow the books from other libraries connected to the FSU library system. All additional course reading will be available on the Blackboard site.

Required:

- Carey, Mark. *In the Shadow of Melting Glaciers: Climate Change and Andean Society*. Oxford: Oxford University Press, 2010.
- Davis, Mike. *Late Victorian Holocausts: El Niño Famine and the Making of the Third World*. London: Verso, 2001.
- Fagan, Brian. *The Long Summer: How Climate Changed Civilization*. New York: Basic Books, 2004.
- Weart, Spencer. *The Discovery of Global Warming*. 2nd ed. Cambridge, MA: Harvard University Press, 2008.

Recommended:

- Ruddiman, William F. *Plows, Plagues and Petroleum: How Humans Took Control of Climate*. Princeton: Princeton University Press, 2005.

Reading

Students must read the materials outlined on this syllabus every week before class and bring copies of these readings with them to our meetings. The majority of the reading for this class will be works of scholarly analysis known as secondary sources. When reading secondary sources you should try to grasp the big picture, the author's argument about a given historical problem. Pay particular attention to introductions, conclusions, and topic sentences and take notes on the author's main points. You should also focus on how these historians use primary sources—first-hand artifacts from the historical period being discussed—to elaborate their explanations. Several of the readings for this course will also present scientific arguments. Likewise in these cases, try to comprehend the big picture and do not obsess about keeping track of every detail.

Assignments

This class will include three quizzes, three short papers and daily reading responses. The quizzes are designed to help students master some significant factual information about human history with climatic systems. The instructor will make review sheets for the quizzes available to students ahead of time.

The first paper should be about 800-1000 words and discuss the impact of the Little Ice Age on European history. The second paper is the most substantial assignment of the semester. Students will need to read remaining sections of Mike Davis's *Late Victorian Holocausts* and evaluate how his argument plays out in one of three geographical settings (India, China, or Brazil). This paper should be 1500 to 2000 words long. A final paper of 800-1000 words will ask students to examine the development of modern climate science, including the emergence of a widespread consensus about the phenomenon of global warming. All of these papers need to be well written and demonstrate analytic sophistication to earn a good grade. In certain circumstances the instructor may make a re-write option available to students who would like to improve their grades on written work. The instructor will also provide more detailed directions for each paper.

Finally, for every class that has assigned reading, students will be responsible for responding to a set of questions posed by the instructor before the beginning of class. These questions will be designed to encourage comprehension and contemplation of the

reading. There will often not be a single correct answer to each question. Students should expect three or four questions for each class period and should post their answers on Blackboard. Responses must be written in complete sentences. During class sessions, the instructor may use these questions to help start discussion on specific issues.

Participation

Your active participation in our meetings is an important part of the course. Please come to class prepared to raise questions, express ideas, and craft arguments about issues that come up in the readings and lectures. I encourage you to treat the discussion parts of class as a forum for civil debate and not to be afraid to offer conflicting perspectives from your fellow students or me. As long as we maintain a respectful tone and aspire for intellectual depth, we stand to learn much from diverse points of view.

Grade breakdown

Participation	10%
Reading responses	10%
Quiz 1	10%
Paper 1	15%
Quiz 2	10%
Paper 2	20%
Quiz 3	10%
Paper 3	15%

Guidelines and grading criteria for written work

Writing assignments should meet the following guidelines and may be rejected if they do not.

- All written work should be typed (word-processed), double-spaced, 12 pt. font. Please put your name at the top and number all pages. You should submit both a print copy and an electronic version of your papers.
- References to sources of interpretation, fact, and evidence should always be duly noted with footnotes.
- Footnotes referencing course texts should be formatted to have the author's name, a brief title, and page number(s). For example, Fagan, *The Long Summer*, 150. Any citations to materials outside of course readings must be in Chicago Style footnotes. See, http://www.chicagomanualofstyle.org/tools_citationguide.html.
- No bibliographies or final reference lists are needed unless texts from outside our common reading list are being used.

The descriptions below provide criteria that the instructor will use to evaluate written work. They are designed to give you a general sense of how grades will be determined and are not a rigid set of standards that every paper must meet.

- F Grade = Unacceptable: An "F" paper is incomplete, plagiarized, or not turned in. It fails to meet the minimal requirements of the assignment.
- D Grade = Below Standard: A 'D' range paper fails to contain a coherent thesis; provides little or no relevant evidence; contains numerous factual, grammatical, or spelling errors; or is very poorly written.

- C Grade = Acceptable: A 'C' range paper has a thesis, but not a precise or provable one; uses some evidence, but not sufficient, or very well analyzed evidence; contains several factual, grammatical, or spelling errors; or is hard to read (for example, it is confusing, wordy, or poorly organized).
- B Grade = Good: A 'B' range paper has a provable if not exceptional thesis; uses appropriate evidence and analysis to support it; contains few factual, grammatical, or spelling errors; and reads well beginning to end (that is, it has a clear introduction, middle, and conclusion).
- A Grade = Excellent: An 'A' range paper has an insightful and engaging thesis; uses robust amounts of evidence and analysis to support it; has no (or very few) grammatical or spelling errors; and is a pleasure to read (that is, it tells a clear analytical story, and does so with style).

Classroom conduct

Students should arrive to class on time, turn off the sounds on their cell phones, and behave in a respectful manner toward the instructor and other students. This means being quiet and listening during lecture and discussion. Also please refrain from distractions such as texting, tweeting, checking facebook, googling your name, and the like. You may bring computers to class for educational purposes (taking notes, reading electronic versions of articles, etc.). However, if you are caught using your computer or mobile device for any other purpose, you will forfeit your right to use it in class.

Late work

All work for this course should be submitted on time, by the beginning of class on the day that it is due. Late papers will be docked a full letter grade for every day that they are late. The instructor will make exceptions in cases of student illness, family emergencies, or other situations that count as excused absences. Even after a paper is late enough to automatically receive a failing grade, it still must be turned in for the student to pass the class. Reading responses cannot be turned in late and are not required in cases of excused absences.

Attendance

Attendance is necessary and mandatory. Any unexcused absence will negatively affect your performance in the course by lowering your participation grade. After two unexcused absences, each additional unexcused absence will also lower your *total course grade* by one percentage point. The grounds for excused absences are described below in the university attendance policy. All other absences are unexcused.

University attendance policy

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Plagiarism

Academic dishonesty undermines intellectual development and the purpose of higher education. Violations of academic integrity may result in failure of this course or other disciplinary measures. I take this matter very seriously. Plagiarism is the representation of the words or ideas of another as one's own. Submitting papers not written by the student is only the most blatant form of plagiarism. It also includes, but is not limited to: copying another student's work in exams, papers, or other exercises; inappropriate collaboration with another student; and verbatim copying, close paraphrasing, pasting in, or recombining published materials, including materials from the internet, without appropriate citation. See the FSU Department of History's statement: <http://www.fsu.edu/~history/plagiarism.html>.

Academic honor policy

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to ". . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://dof.fsu.edu/honorpolicy.htm>.)

Americans with Disabilities Act

Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Student Disability Resource Center; and (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class. This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities, contact the:

Student Disability Resource Center
874 Traditions Way
108 Student Services Building
Florida State University
Tallahassee, FL 32306-4167
(850) 644-9566 (voice)
(850) 644-8504 (TDD)
sdrc@admin.fsu.edu
<http://www.disabilitycenter.fsu.edu/>

Office hours/email

I encourage you to come to office hours to discuss any issues you are having with the course or get help with readings and assignments. You also should not hesitate to schedule an appointment with me for another time outside of office hours. I will generally be available most of the time between Monday and Wednesday. I will attempt to answer your email as promptly as possible, but please allow me at least twenty-four hours to respond to you. Please include a subject line in your emails, sign them, and be respectful.

Syllabus change policy

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.

CLASS SCHEDULE

Monday, August 29

Introduction

Wednesday, August 31

Edmond A. Mathez, "Climate in Context," *Climate Change: The Science of Global Warming and Our Energy Future* (New York: Columbia University Press, 2009), 1-11.

Fagan, *The Long Summer*, xi-xvi, 1-10.

James S. Russell, "Army Corps Mississippi Flood Failures Demand New Vision," *Bloomberg* (August 23, 2011), <http://www.bloomberg.com/news/print/2011-08-23/u-s-army-corps-flood-failures-on-mississippi-demand-new-vision.html>

Check out the photos at http://www.boston.com/bigpicture/2011/05/mississippi_river_flooding.html

Monday, September 5

LABOR DAY- NO CLASS

Wednesday, September 7

Ruddiman, *Plows, Plagues and Petroleum*, 25-54.

Fagan, *The Long Summer*, 13-33, 59-77.

Monday, September 12

Fagan, *The Long Summer*, 99-145.

Wednesday, September 14

Fagan, *The Long Summer*, 147-188.

Monday, September 19

Fagan, *The Long Summer*, 189-228, 247-252.

Quiz 1

Wednesday, September 21

Ruddiman, *Plows, Plagues and Petroleum*, 5-12, 63-105.

Monday, September 26

H. H. Lamb, "The Little Ice Age," *Climate, History and the Modern World*, 2nd ed. (London: Routledge, 1995), 211-241.

Wednesday, September 28

Wolfgang Behringer, "Cultural Consequences of the Little Ice Age," *A Cultural History of Climate* (Cambridge: Polity Press, 2010), 121-167.

Little Ice Age Paper Due!

Monday, October 3

Richard B. Stothers, "The Great Tambora Eruption in 1815 and Its Aftermath," *Science* 224, no. 4654 (June 15, 1984): 1191-1198.

Gillen D'Arcy Wood, "The Volcano Lover: Climate, Colonialism, and the Slave Trade in Raffles's History of Java (1817)," *Journal of Early Modern Cultural Studies* 8, no. 2 (Fall/Winter 2008): 35-55.

Wednesday, October 5

Davis, *Late Victorian Holocausts*, 1-22.

Monday, October 10

Davis, *Late Victorian Holocausts*, 25-59, 91-115.

Wednesday, October 12

Davis, *Late Victorian Holocausts*, 119-140.

Monday, October 17

Davis, *Late Victorian Holocausts*, 141-175.

Wednesday, October 19

Davis, *Late Victorian Holocausts*, 213-276.

Monday, October 24

No Reading

Davis Paper Due!

Wednesday, October 26

Carey, *In the Shadow of Melting Glaciers*, 3-44.

Monday, October 31

Carey, *In the Shadow of Melting Glaciers*, 45-96.

Wednesday, November 2

Carey, *In the Shadow of Melting Glaciers*, 97-146.

Monday, November 7

Carey, *In the Shadow of Melting Glaciers*, 147-197.

Quiz 2

Wednesday, November 9

Katherine Anderson, "Mapping Meteorology" and James Rodger Fleming, "Global Climate Change and Human Agency: Inadvertent Influence and 'Archimedean' Interventions," in James Rodger Fleming, Vladimir Jankovic and Deborah R. Coen, eds., *Intimate Universality: Local and Global Themes in the History of Weather and Climate* (Sagamore Beach: Science History Publications, 2006), 69-91, 223-248.

Monday, November 14

Kristine C. Harper, *Weather by Numbers: The Genesis of Modern Meteorology*
(Cambridge, MA: The MIT Press, 2008), 11-67.

Wednesday, November 16

Kristine C. Harper, "Climate Control: United States Weather Modification in the Cold War and Beyond," *Endeavour* 32, no. 1 (March 2008): 20-26.

Weart, *The Discovery of Global Warming*, vii-x, 1-18.

Monday, November 21

Weart, *The Discovery of Global Warming*, 19-62.

Wednesday, November 23

NO CLASS – THANKSGIVING BREAK

Monday, November 28

Weart, *The Discovery of Global Warming*, 63-113.

Wednesday, November 30

Weart, *The Discovery of Global Warming*, 114-154.

Monday, December 5

Weart, *The Discovery of Global Warming*, 155-204.

Wednesday, December 7

No reading

Quiz 3

Wrap up

December 9

Climate Science Paper Due!