Climate Change and Human History
Third Year Level

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Course Description:

On September 27th, 2013 the UN Intergovernmental Panel on Climate Change warned that even a one degree Celsius rise in average global temperatures would have alarming consequences for life on Earth. While global warming is unprecedented in its origin and potential consequences for human beings, climate change is actually nothing new. For thousands of years, entirely natural influences have altered Earth’s climate in ways that shaped human history. In this course, we will explore those relationships.

Because climate history is part of the discipline of environmental history, this course provides an introduction to the study of relationships between nature and humanity. Thereafter, we will investigate three questions. First: what were the major changes in average temperature, precipitation, and atmospheric circulation during the lifetime of our species, and how can we reconstruct them? Second, how did climatic variability influence different societies, and with what consequences? Third, how did people in different societies understand climate change, with what discourses and social representations?

This is an interdisciplinary course. Although many of our readings were written by historians, we will also examine articles authored by climatologists, geographers, physicists and archeologists. We will learn the value of models, statistics, and computer simulations even as we explore historiographical debates and methodologies. Ultimately you will arrive at a unique understanding of the past while gaining clearer insight into the challenges our world faces today. In the process, you will improve your ability to communicate information, defend your conclusions, and interpret complex relationships.

Breakdown:

- Participation: 10%
- Book Review (5 pages): 15%
- Paper Proposal (includes potential bibliography): 10%
- Primary Source Essay (10 pages): 35%
- Exam: 30%
Evaluation:

Assignment Description:

Book Review:

You must write a five-page, double-spaced paper that reviews one of the following books:


Begin by evaluating one of these books for its argument, how it supports that argument, and its structure. Next, consider how your book fits into broader scholarship. Who is your author referencing? Is your author framing his argument in the context of a broader scholarly debate? In that context, is your author’s argument convincing? Look up book reviews in journals and, if necessary, support your conclusions with scholarly articles at the Climate History Network (http://climatehistorynetwork.com/bibliography).

Paper Proposal:

Examine one of the following primary sources:


3. Ten paintings by Lucas van Valckenborch, Pieter Brueghel the Younger, Jan Abrahamsz Beerstraten, Hendrick Avercamp, Jacob van Ruijsdael, Willem van de Velde the Elder and Willem van de Velde the Younger. Available on your course website.

Now, write one double-spaced page that explains how you will use one of these primary source collections to write an essay that links the climatic fluctuations of the Little Ice
Age to early modern human history. Support your interpretation with no more than five secondary sources that help you contextualize your primary source. List all of your sources in a bibliography on the second page of your assignment.

If you wish to investigate a primary source you found yourself, you must email your course instructor no less than two weeks before the assignment deadline. In your email, list your source and provide a one-paragraph outline of how you hope to use it.

Be sure to introduce and describe your primary source(s). Read Kishlansky’s guide to reading primary sources: [http://www.clas.ufl.edu/users/sterk/junsem/reading.html](http://www.clas.ufl.edu/users/sterk/junsem/reading.html)

**Primary Source Paper:**

Write a ten-page investigation of relationships between climate change, weather, and human history. Support your argument using the primary source(s) and supporting secondary sources that you analyzed in your paper proposal. Begin by introducing:

1. The climatic trends that prevailed during the decades you are investigating.

2. Human history during this period, in the region you are examining.

3. Your primary source(s). Who wrote it? Why? How is it useful for climate history?

Now, the bulk of your paper should analyze what your primary source(s) can tell us about relationships between human history, weather, and climate change. According to your primary source(s), what were some important relationships between human history and weather events? Can these weather events be linked to climatic trends outlined in your secondary sources? How are these weather events understood in your primary source(s)?

**Exam:**

The exam will be divided into two parts:

1. Multiple choice and short answer.

2. Essay answers. You will be required to write two essays, one of which will involve the interpretation of a primary source supplied in your exam booklet.

**Essay Evaluation:**

*Each of these criteria will be worth approximately a third of your grade:*

**Clarity:**

Are you using words that appropriately and formally express your meaning? Are your points sourced correctly? Do your sentences precisely express your meaning, and are they
grammatically correct? Is there a clear thesis that presents an argument and outlines how that argument will be defended? Is there a coherent organization that culminates in a conclusion that references the thesis?

**Research:**

Are your secondary sources serious works of scholarship, and are they relevant to your argument? Do your primary sources illuminate the issue you are investigating, and to what extent? Are those primary sources relevant to your argument, and do you present them in the context of your secondary sources?

**Ideas:**

How creative and nuanced are your arguments? Are you merely repeating the claims of other scholars, or are you evaluating them against their colleagues, and against primary sources (where you are asked to use them)? To what extent can you build new knowledge rather than interpreting old ideas?

*Note that your final mark may not precisely reflect your score on each of these three criteria. They are a guide to your mark, but they will not determine it.*

**Assignment Submission:**

You must be present in class to submit your assignments to me. You must also send a PDF of your assignment to: degrootteacher@gmail.com.

**Late Submission:**

Late assignments will receive a penalty of 5% for every 24 hours after the assignment due date. No assignments will be marked if they are submitted more than one week after the due date!

You must email a PDF of your late assignment to me, and you must then submit your paper copy in the following class. History department secretaries are not tasked with processing late essay submissions, and I will not mark anything that ends up in my mailbox.

**Extensions:**

You may ask me to extend your due date, but your request will only be granted in exceptional circumstances (compassionate grounds, illness, etc.). The length of the extension granted will be judged on a case by case basis.

**Required Course Texts:**


Coursepack.

**Notes:**

**Academic Honesty:**

This is fourth year. Accordingly there is absolutely no tolerance for academic dishonesty in this course. If you copy a classmate’s work, submit an essay you didn’t write or knowingly use information you haven’t cited you will be referred to the Undergraduate Director of the History Department. You will be judged on a case by case basis, but I will usually recommend the stiffest possible penalties: at a minimum, expulsion from the course and a permanent mark on your academic record.

The structure of the course assignments is not at all conducive to plagiarism. Still, all students are strongly recommended to study York University’s academic integrity tutorial, at: [http://www.yorku.ca/tutorial/academic_integrity](http://www.yorku.ca/tutorial/academic_integrity).

**Bad Weather:**

You are still required to read material that would have been discussed on classes cancelled by bad weather. We will take up these readings in the following seminar. You still need to email me assignments due on cancelled classes as a PDF. You must then give me the printed copy on the next class in order to avoid a late penalty.

**Missed Tests:** if you have a substantive reason for missing the exam, such as illness or compassionate grounds, and you have supporting documentation, you may request accommodation from your course instructor. Your petition will be judged on a case-by-case basis. You may be allowed to write a makeup exam on a date specified by your instructor.

**Additional Information:**

For additional information on your rights and responsibilities as a student in this class, access the Senate Committee on Curriculum and Academic Standards webpage (see Reports, Initiatives, Documents), at: [http://www.yorku.ca/secretariat/senate_cte_main_pages/ccas.htm](http://www.yorku.ca/secretariat/senate_cte_main_pages/ccas.htm). From there you can browse:

- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities.
Schedule:

Please note that this schedule is approximate and may be changed by your instructor.

Section 1: Approaching an Interdisciplinary Field.

Week 1: Introductions.

Lecture 1: Introduction. What is our mission in this course? How can we read in the language of other disciplines?
Lecture 2: Definitions: Climate, Weather, and how they Interact.

Reading:


Week 2: New Historical Genres.

Lecture 1: Introduction to Environmental History and Historical Climatology.
Lecture 2: The Interdisciplinary Reconstruction of Past Climates.

Reading:

“How we can Reconstruct the Past Record of Climate,” in Lamb, Hubert. Climate, History and the Modern World.

Week 3: A Natural History of Climate Change.

Lecture 1: 100,000 Years of Climatic Variability.
Lecture 2: How and Why Does Climate Change?

Reading:

Section 2: Big Concepts, Big Ideas.

Week 4: The Influence of Climate Change.

Lecture 1: Climate Determinism.
Lecture 2: Climate Indeterminism, and the Quest for a Middle Ground.

Reading:

Excerpts from Ladurie, Emmanuel le Roy. Times of Feast, Times of Famine: A History of Climate Since the Year 1000 (Coursepack).

Week 5: Conceptualizing Climate Change.

Lecture 1: Conceptual and Explanatory Models.
Lecture 2: Applying Different Models to Climate/Society Interactions.

Reading:


Week 6: Natural Disasters and Climate Change.

Lecture 1: What is a “Natural Disaster?”
Lecture 2: Natural Disasters and Climate Change.

Reading:


Section 3: Climate Change and Early Human History.

Week 7: From the Dawn of the Species to the Great Ice Ages.

BOOK REVIEW DUE!

Lecture 1: The Wandering Species.
Lecture 2: Migration, Conflict and Discovery during the Ice Ages.
Reading:


**Week 8: Climate Change and the Global Adoption of Agriculture.**

Lecture 1: The Adoption of Agriculture: Practices, Cultures and Environments.
Lecture 2: The Complex Influence of Climate Change.

Reading:


**Week 9: Classical Greece.**

Lecture 1: Mycenaean and Minoan Civilization.
Lecture 2: From the Polis to the Hellenistic Empires.

Reading:

Excerpt from Carpenter, Rhys. *Discontinuity in Greek Civilization* (Coursepack).

**Week 10: Classical Rome.**

Lecture 1: Climate Change and the Rise of Rome.
Lecture 2: Roman Economy and Ecology.

Reading:


**Week 11: Social and Environmental Catastrophe.**
PAPER PROPOSAL DUE!

Lecture 1: The Collapse of the Western Roman Empire.
Lecture 2: Plague, Famine, and the Mystery of 536 AD.

Reading:

Excerpts from *The Years Without Summer: Tracing AD 536 and its Aftermath*, edited by J. D. Gunn (Coursepack).

**Week 12: Climate, Continuity and Crisis in China.**

Lecture 1: Climate Change, Environmental Transition, and Demographics in Ancient China.
Lecture 2: An Ecological History of Climate Influences from the Shan to the Han Dynasties.

Reading:


**Section 4: Climate Change and the Medieval World.**

**Week 13: The Medieval Climate Anomaly**

Lecture 1: Environmental Causes and Consequences of a Warmer Climate.

Reading:


**Week 14: Vikings in the North**

Lecture 1: Northern Warmth and the Viking Empire.
Lecture 2: The First Signs of Cooling and the Fate of Greenland’s Viking Colonies.
Reading:


**Week 15: Climate Change and South American Civilization**

Lecture 1: Mayan Hiatus and Collapse.
Lecture 2: Crop Yields, Climate Change and the Rise of the Inca.

Reading:


**Section 5: The Little Ice Age.**

**Week 16: 536 AD Writ Large: the Unstable Fourteenth Century in Europe.**

Lecture 1: The Great Famine.

Reading:


**Week 17: Crisis and Climate Change: the Sixteenth and Seventeenth Centuries.**

Lecture 1: Dearth, Reformation, and Economic Transformation.
Lecture 2: Climatic Variability and Social Adaptation.

Reading:

**Week 18: The Dutch Exception**

Lecture 1: The Frigid Golden Age.
Lecture 2: Climate Change and the Watery Empire.

Reading:

Dagomar Degroot, “Conflict and Climate in the North Sea, 1652 to 1674.” *Environment and History*.

**Week 19: The Age of Exploration.**

Lecture 1: Settling the Americas in a Frigid Climate.
Lecture 2: Exploration, Exploitation, and Climate Change in the Arctic.

Reading:

Excerpts from Wickman, Thomas M. *Snowshoe Country: Indians, Colonists and Winter Spaces of Power in the Northeast, 1620-1727* (Coursepack).
Excerpts from De Veer, Gerrit. *The True and Perfect Description of Three Voyages by the Ships of Holland and Zeeland* (Coursepack).

**Week 20: The View from Asia**

Lecture 1: The Little Ice Age in China.
Lecture 2: The European Settlement of Australia.

Reading:


**Section 6: Understanding a Warming World.**

**Week 21: Climate Change and World History, 1750-1950.**

*PRIMARY SOURCE ESSAY DUE!*

Lecture 1: Environmental and Social Revolutions at the End of the Little Ice Age.
Lecture 2: Industry, War, and Climate Change.

Reading:


**Week 22: Shifting Scientific Paradigms.**

Lecture 2: Different Disciplines, Different Contributions.

Reading:


**Week 23: The Origin and Significance of Global Warming.**

Lecture 1: Anthropogenic Causes and Environmental Consequences.
Lecture 2: Social Influences and Projections.

Reading:


Week 24: Skeptics and the Great “Debate.”

Lecture 1: Noise in the Signal: are there Problems with the Global Warming Thesis?
Lecture 2: The Origin and Significance of Global Warming Skepticism. Exam Review.

Reading: