

HIST 008: GLOBAL WARMING CAUSES, CONSEQUENCES, AND CONTROVERSY



Essential Information:

Lectures: Tuesdays and Thursdays, 2:00-3:15.

Office Hours: Wednesdays, 1:00-3:00 PM, ICC 627

Professor: Dr. Dagomar Degroot

Professor's email: dd865@georgetown.edu

Professor's website: DagomarDegroot.com

Course Website: warmingmodule.weebly.com

Course Description:

The world is warming, and it is warming fast. The culprit: carbon dioxide, methane, and other “greenhouse gases” added to our atmosphere by human industry and agriculture. Average global temperatures are now nearly one degree Celsius higher than they were midway through the twentieth century.

Around the world, weather is getting “weird.” Tropical cyclones, droughts, torrential rains, heat waves, and even cold snaps are all more severe than they used to be. In developed societies, such weather has led to thousands of deaths and billions of dollars in lost economic productivity. In impoverished societies, it has worsened existing social inequalities and driven migration in ways that have provoked civil wars. Ever more extreme weather in our warmer future could threaten the survival of rich and poor countries alike.

This module will take you beyond the science of global warming. We will explore how scientists discovered human-caused climate change, how they communicated the threat to the public, and why they have failed to motivate the kind of political action that will save us from catastrophic “climate breakdown.” We will investigate the causes for global warming denial, analyse the possible social and political consequences of climate change, the evaluate the case for climate “determinism.” You should emerge with a better understanding of what may be seminal crisis of our lives.



Course Goals:

Like other courses offered by the Department of History, this course will help you:

1. Gain a deeper appreciation of the nature and practice of history as a discipline, and as the study, based on evidence, of human experiences, interactions, and relationships as they change over time.
2. Learn that history does not consist of a simple succession of self-evident facts, and that evidence-based interpretation and analysis are central to all historical work.
3. Hone reading, writing, and oral communication skills.
4. Develop your capacity to think historically: to situate events and developments in their historical context for the purpose of critical analysis.
5. Expand your ability to engage with complex causal analysis, and to articulate arguments that integrate supporting evidence and analytical commentary.
6. View the world from perspectives other than your own.

This course in particular will also help you:

1. Appreciate the significance of, and deep context for, anthropogenic global warming.
2. Understand complex relationships between climate change and humanity, in the past, present, and future.
3. Broaden your appreciation for diverse scholarly disciplines, and their distinct ways of deciphering the past.

Core Pathways:

This module is part of the Core Pathways Initiative. As a part of the initiative, the course follows a 7.5-week A/B schedule that pairs with another course in the latter half of the semester. By enrolling in the module, you are also part of a larger learning community of faculty members, students, and other campus/community partners to engage with the complex factors and challenges presented by climate change.

The Core Pathway Initiative seeks to integrate differing perspectives and disciplines in a conversation around the many issues related to climate change. To foster that integration, and as part your participation in the initiative, over the course of each semester there will be four required integrative moments that bring together the entire Pathway (students and faculty) to bring to bear collective experiences on facets of the broader thematic topic of climate change.

The calendar below identifies the Integrative Days for the semester. Please plan all of your travel and semester plans accordingly to keep these dates in mind. For more information on the Pathway or questions about the initiative, visit www.corepathways.georgetown.edu or contact corepathways@georgetown.edu.

Core Pathways

Climate Change Spring 2020

	Kickoff Dinner		First Day of Classes		Integrative Day (MANDATORY)
	Last Day of Classes		No Classes		

WEEK	1	2	3	4	5	6	7	8 TRANSITION WEEK	9	10	11	12	13	14	15	16	17
Tuesday Session		 1/14	1/21	1/28	2/4	2/11	2/18	2/25	 3/3	3/10	3/17	3/24	3/31	4/6	4/14	4/21	 4/28
Thursday Session	 1/9	1/16	1/23	1/30	2/6	2/13	2/20	 2/27	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	TBD
	 Module A Begins							 Module A Ends		 Final Exercise							
		 Fall Kickoff Dinner 5-7PM						 Integrative Day									 Module B Last Class
								 Module B Begins									

Breakdown:

Participation:	30%
Exxon Papers Essay:	20%
“Tipping Points” Article:	20%
Final Test:	30%

Evaluation:

Participation:

You will earn half your participation grades for attending seminar. The other half will reflect both the quantity and especially the quality of your comments. When we break into groups for debates and primary source exercises, I will evaluate your group participation. If you want top grades, I strongly encourage you to keep notes from your readings. You should aim for at around two pages of single-spaced notes per week.

Exxon Papers Essay:

Write a five-page essay that analyzes **at least three** of the Exxon Mobil primary source documents accessible through our course website. Create a thesis based on these documents that answers the following questions:

1. Since when have Exxon Mobil executives known that their industry was contributing to anthropogenic climate change?
2. When and how did they respond to this knowledge?

You may use **at most** four secondary, peer-reviewed sources to help you make your argument.

“Tipping Points” Article:

Visit ClimateTippingPoints.com. Use the tools listed on the site to write a short (roughly 750-word) article that explains the projected consequences of global warming in an American county over the coming century. Your essay will tell our readers: 1) How climate change will affect a local environment; 2) How we know; and 3) How the local environmental consequences of climate change may influence peoples' lives.

You can bring in additional information from newspapers or scholarly articles. You should also include maps or graphs that visualize the impact of climate change on a particular place, so long as you are able to explain how they were made. With your consent, I will edit your article and publish it on our website. You may remain anonymous if you choose.

I have written a template on Washington, DC that should give you an idea of what I am looking for. We will also discuss how to write the article in class. You must email me a PDF **and** a Word or Open Office version of your article, as well as separate attachments for all the images you used. I do not need a physical copy.

Final Test:

This 75-minute test consists of six short essay questions, of which you must answer three. I will give you many more details in class.

Grading Criteria:

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 in the context of other arguments and concepts? To what extent can you develop fresh ideas?

Important Notes:

House Rules:

You may use your laptops or tablets to take notes or to look up information in class. However, you may **not** use your phones, and you may **not** record your professor's lectures. You may not access social media in class, which is distracting both for you and for your classmates.

Do not show up late to class. This detracts from your learning and disturbs your classmates. If you are repeatedly late, I may lower your participation grade without informing you.

Submitting Assignments:

Assignments are due **at the beginning of class**, including assignments you need to email to me. Any assignment submitted after the first 15 minutes of class is late. Late assignments will receive a 5%/day penalty. I will not grade assignments that are more than one week late, unless you have negotiated an extension with me (see below).

Extensions:

You may ask me for a **short** extension *before an assignment is due*. I am more likely to grant your request if you A) give me a convincing explanation for your tardiness; B) give me a roadmap that outlines how you will complete your assignment; and C) propose a new due date.

I will only grant requests for an extension on or after the assignment due date in truly exceptional circumstances (a death in the family, for example, or a very serious illness). In such cases, I may ask for written verification.

Be sure to contact your deans in case of absences, difficulties meeting due dates, and other problems.

Missing Assignments:

If you fail to hand in an assignment, you will receive a zero for that assignment. You will not fail the course, but your ability to pass the course will be in serious jeopardy. You will **not necessarily** receive a message from me that inquires about your missing assignment. I expect you to handle your obligations yourself.

Missing Class:

You have **one** excused absence. If you think that you will need to miss several classes for significant and predictable reasons (such as religious observances, or University-sponsored athletic events), you must inform me of the specific circumstances and dates **at the start of the module**.

I will try to accommodate requests for a reasonable number of such absences. You must make sure that the details of the situation are clear to me early on, so that you may have a chance to enroll in a different class if I cannot accommodate your circumstances. Note that the short length of this module will make it hard for you to do well if you must miss more than two classes.

You receive a grade for every class you attend. If you do not attend a class and you have already had your one excused absence, you will receive a grade of **zero** for the class you missed. This will significantly lower your overall grade.

Academic Honesty:

Plagiarism is not just about copying someone else's writing. Any time you present ideas without correctly citing them, you are committing plagiarism. This is the most serious intellectual offense you can commit in academia, and your professors take it very seriously.

It is **your** responsibility to familiarize yourself with the [Georgetown University Undergraduate Honor System](#). It is your professor's duty to refer academic misconduct - including plagiarism - to the Georgetown Honor Council. If the Council decides that you have plagiarized, you will fail this class and suffer additional penalties.

Beyond the Course:

I am committed to supporting survivors of sexual misconduct, which includes relationship violence, sexual harassment and sexual assault. However, university policy requires faculty to report any disclosures about sexual misconduct to the Georgetown Title IX Coordinator, who directs the University's response to sexual misconduct.

Georgetown has a number of fully confidential professionals who provide support and assistance to survivors of sexual assault and other forms of sexual misconduct. They include:

Jen Schweer, MA, LPC, Associate Director of Health Education Services for Sexual Assault Response and Prevention. Contact: (202) 687-0323, jls242@georgetown.edu.

Erica Shirley, Trauma Specialist, Counseling and Psychiatric Services (CAPS). Contact: (202) 687-6985, els54@georgetown.edu.

More information about campus resources and reporting sexual misconduct can be found at: <http://sexualassault.georgetown.edu>.

Schedule:

- *This schedule may be changed by your professor.*
- *Complete all weekly readings by Tuesday.*

Week 1: Global Warming, the Anthropocene, and the Great Acceleration

March 5

Readings:

1. Heymann, Matthias and Dania Achermann. "From Climatology to Climate Science in the Twentieth Century." In *The Palgrave Handbook of Climate History*, edited by Sam White, Christian Pfister, and Franz Mauelshagen. (London: Palgrave Macmillan, 2018).
2. Brönnimann, Stefan, Sam White, and Victoria Slonosky. "Climate from 1800 to 1970 in North America and Europe." In *The Palgrave Handbook of Climate History*.
3. Brönnimann, Stefan. "Global Warming (1970-Present)." In *The Palgrave Handbook of Climate History*. I will provide a copy of your *Palgrave Handbook* readings.
4. "Global Warming of 1.5° C: Summary for Policymakers." IPCC. Available at: http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf.

Week 2: Heat, precipitation, and agriculture

March 17

March 19

Readings:

1. Ingram, B. Lynn and Frances Malamud-Roam. *The West Without Water: What past Floods, Droughts, and Other Climatic Clues Tell Us about Tomorrow*. Berkeley: University of California Press, 2015. Chapters 1-4 and 13-14. Available online.
2. Glotter, Michael, and Joshua Elliott. "Simulating US agriculture in a modern Dust Bowl drought." *Nature Plants* 3:1 (2016): 1-6.
3. Benjaminsen, Tor A., and Pierre Hiernaux. "From Desiccation to Global Climate Change: A History of the Desertification Narrative in the West African Sahel, 1900-2018." *Global Environment* 12:1 (2019): 206-236.

Week 3: Conflict in the Middle East and Africa

March 24

March 26

Readings:

1. Burke, Marshall B. et al. "Warming increases the risk of civil war in Africa." *Proceedings of the National Academy of Sciences* 106:49 (2009): 20670-20674.
2. Sutton, Alexandra E. et al., "Does warming increase the risk of civil war in Africa?" *Proceedings of the National Academy of Sciences* 107:25 (2010): E102-E102.
3. Werrell, Caitlin E., Francesco Femia, and Troy Sternberg. "Did we see it coming?: State fragility, climate vulnerability, and the uprisings in Syria and Egypt." *SISIS review of international affairs* 35:1 (2015): 29-46.

4. Max Brosig et al. "Implications of Climate Change for the U.S. Army." https://climateandsecurity.files.wordpress.com/2019/07/implications-of-climate-change-for-us-army_army-war-college_2019.pdf

Week 3: Global health and wealth

March 31

April 2

Readings:

1. Patz, Jonathan A., Diarmid Campbell-Lendrum, Tracey Holloway, and Jonathan A. Foley. "Impact of regional climate change on human health." *Nature* 438:7066 (2005): 310-317.
2. Fan, Qin, and Meri Davlasheridze. "Economic Impacts Of Migration And Brain Drain After Major Catastrophe: The Case Of Hurricane Katrina." *Climate Change Economics (CCE)* 10, no. 01 (2019): 1-21.
3. Burke, Marshall, Solomon M. Hsiang, and Edward Miguel. "Global non-linear effect of temperature on economic production." *Nature* 527:7577 (2015): 235.
4. Weitzman, Martin L. "Fat-Tailed Uncertainty in the Economics of Catastrophic Climate Change." Symposium: Fat Tails and the Economics of Climate Change. Available at: <https://scholar.harvard.edu/files/weitzman/files/fattaileduncertaintyeconomics.pdf>.

Week 4: Rising seas in coastal communities

April 6: EXXON PAPERS ESSAY DUE

Readings:

1. Esteban, Miguel et al. "Adaptation to sea level rise on low coral islands: Lessons from recent events." *Ocean & coastal management* 168 (2019): 35-40.
2. Molinaroli, Emanuela, Stefano Guerzoni, and Daniel Suman. "Do the Adaptations of Venice and Miami to Sea Level Rise Offer Lessons for Other Vulnerable Coastal Cities?" *Environmental management* 64:4 (2019): 391-415.
3. Liao, Kuei-Hsien. "Living with Floods: Ecological Wisdom in the Vietnamese Mekong Delta." In *Ecological Wisdom*, pp. 195-215. Springer, Singapore, 2019.
4. Platt, Harold L. *Sinking Chicago: Climate Change and the Remaking of a Flood-Prone Environment*. Philadelphia: Temple University Press, 2018. Available online. Read introduction, pages 119-149.

Week 5: Denial and delay in the United States

April 14

April 16

In class movie: *Merchants of Doubt*

Readings:

1. Platt, *Sinking Chicago: Climate Change and the Remaking of a Flood-Prone Environment*. Read pages 150-228.

Week 6: The uncertain future

April 21

April 23

Readings:

1. Fleming, James Rodger. "Will Geoengineering Bring Security and Peace? What does History Tell us?". *Sicherheit und Frieden (S+ F)/Security and Peace* (2012): 200-204.
2. Irvine, Peter et al., "Halving warming with idealized solar geoengineering moderates key climate hazards." *Nature Climate Change* (2019).
3. Smith, Christopher J. et al. "Current fossil fuel infrastructure does not yet commit us to 1.5 C warming." *Nature communications* 10:1 (2019).
4. Naam, Ramez. "How to decarbonize America - and the world." TechCrunch. Available at: <https://techcrunch.com/2019/02/15/how-to-decarbonize-america-and-the-world>.
5. Hulme, Mike. "Reducing the future to climate: a story of climate determinism and reductionism." *Osiris* 26:1 (2011): 245-266.

Week 7: Test

April 28: FINAL TEST

April 30: TIPPING POINTS ARTICLE DUE