Climate Change is History

UGS 302 DD (62160) Fall 2021
RLP 0.122, TTh 8:00am–9:15am

Instructor: Dr. Megan Raby, meganraby@austin.utexas.edu
Office Hours: Via Zoom, T 10:00am-11:00am, or by appointment.

Course Description:
Climate change is often discussed in the future tense. But to confront this contemporary crisis, we need to understand its historical origins and precedents. Global warming is the result of human choices in the past and present, and it harms not only nature but ourselves. It is therefore not simply a scientific problem, but rather one that needs humanistic and historical perspectives for creative solutions.

This course will draw on a range of interdisciplinary scholarship on humans and nature through deep time. To gain insight into our own sources of vulnerability and resilience, we will explore how past cultures responded to natural environmental changes. To address root causes of global warming, we will evaluate arguments about the social, cultural, political, and economic processes that shifted human activities toward ever-increasing emissions of CO2. To inform how we act, we will engage with the experiences of social and environmental movements locally and around the world. Today, the science is clear, but our future depends on a deeper understanding the human dimensions of climate change in long-term perspective.

Objectives:
• Examine how societies have understood, shaped, and been shaped by the environment throughout history.
• Reflect on how historical perspectives can inform our responses to present-day climate change.
• Demonstrate critical thinking and information literacy.
• Improve your written and oral communication skills.
• Access and use some key resources ("gems") of the University of Texas.

Signature Course: This is a First-Year Signature Course. Signature Courses are seminar-format classes that focus on a contemporary issue. They are designed to introduce undergraduates to scholarly analysis from an interdisciplinary perspective. They also include an introduction to University resources, such as research facilities, museums, and attendance at University lectures or performances as assigned.

Difficult Dialogues: Difficult Dialogues Signature Courses feature dialogue-based learning, in which students engage with the course topic from multiple points of view. Faculty are trained to teach students the skills they need to participate in constructive dialogue about controversial and potentially divisive issues.

Writing Flag: Courses that carry the Writing Flag are designed to give students experience with writing in an academic discipline. In this class, you can expect to write regularly during the semester, complete substantial writing projects, and receive feedback from your instructor to help you improve your writing. You will also have the opportunity to revise one or more assignments, and you will be asked to read and discuss your peers' work.
Readings:

Three required textbooks are available for purchase at the Co-op. Hulme and Oreskes & Conway are also freely available as ebooks through UT's library website:


Additional required readings will be posted on our course's Canvas site (http://canvas.utexas.edu). In addition to accessing course materials, you will use Canvas to communicate and collaborate online, check grades, and submit assignments. 24/7 Canvas support is available through the site's "Help" menu or at 1-855-308-2494.

Assignments and Evaluation:

See Canvas for assignment rubrics and a more detailed breakdown of the grading structure.

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<thead>
<tr>
<th>Assignment Type</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Participation in Discussion</td>
<td>20%</td>
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<tr>
<td>Research and Writing Assignments:</td>
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<tr>
<td>Reflections</td>
<td>30%</td>
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<tr>
<td>Essays</td>
<td>40%</td>
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<tr>
<td>Oral Presentations</td>
<td>10%</td>
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**Participation**

Participation means active involvement in class discussion and activities. Come to class prepared to discuss course readings: Read actively, take notes on texts and discussions, and bring the day's texts and your notes to class. Speak up to ask and answer questions during class, and use evidence to support your contributions. Actively listen to your classmates and be open to hearing diverse perspectives.

To participate you must attend class. However, there are of course times when attendance is not possible or advisable—all the more so amid a global pandemic. Do not come to class if you are sick, and in particular if you have any symptoms of COVID-19, a positive COVID test, or an exposure. To assess this and assist with contact tracing, please use the Protect Texas Together App each day before coming to class. The best way to avoid absence due to COVID-19 is to get vaccinated and follow the CDC and City of Austin's guidance about masking, physical distancing, and other preventative measures.

If you must miss a class in order to observe a religious holy day, documented UT extracurricular activity, illness, or emergency, I will give you an opportunity to complete any missed assignments within a reasonable time. UT Austin policy requires you to notify me of your pending absence at least 14 days prior to the date of observance of a religious holy day.

I will take attendance (to aid in COVID-19 contact tracing), but there is no grade penalty for missing class. However, keep in mind that your participation and ability to complete assignments will likely be affected if you routinely miss class. Please speak with me if you miss or anticipate missing more than 3 class periods.

Attending the two University Lecture Series talks (October 11 & 12, 7-8pm) is also a requirement of all First-Year Signature Courses.
Reflections
Before each class meeting, you will use Canvas Discussion Boards to post your reflections on course readings or other homework activities. On some dates, I may provide a specific prompt or question for you to respond to. On most days, you will reflect on the assigned readings. You should start your post by concisely stating the central argument or major take-away of at least one of the readings or other media. Then, follow by sharing your own thoughts and reactions. For example, you could do one of the following:
• highlight a part of the readings that you found difficult, surprising, new (you could even list unfamiliar terms), or that you just want to discuss in more depth during class;
• point out how different authors disagreed, or raise evidence that an author did not consider; or
• connect the material to an earlier course reading, a news item, personal experience, or research you are doing for an essay.
You have wide latitude in how you choose to write your Reflections! Think of these as a daily journal for the class, to help you prepare your notes for discussion and track the development of your thinking over the course of the semester. I strongly encourage you to read your classmates’ posts, and you are welcome but not required to reply to their posts.
The writing style can be informal or semi-formal. Though you should aim for clarity, these will not be graded on grammar or style. You may share relevant images or links. The absolute minimum length for a Reflection is 3 sentences; there is no maximum length, but quality of engagement with course material is more important than length.

Essays
The three formal writing assignments for this course will challenge you, in different ways, to think historically about climate change:

Essay 1: Place in Time: You will explore the climate history and possible future of a particular place of your choice, using course material and data from a set of online tools. For this paper you will focus on improving your written communication skills and your ability to use and appropriately cite evidence (900-1,200 words).

Essay 2: Histories for a Hot Planet: What histories do we need to face a warming present and future? How did we get here and why does our environmental history matter? You will choose a specific primary source or event relevant to the history of anthropogenic warming and make an argument about why understanding it matters for confronting climate change. This research project is broken into several smaller assignments (proposal, annotated bibliography, drafts) that build on each other. It will also undergo peer review and revision (1,400-2,000).

Essay 3: Future History: To synthesize ideas from the whole course and stretch your creativity, you will write an imagined, fictional “environmental history of the future” as a short end-of-semester paper (600-1000 words). You will present these essays visually online using https://storymaps.arcgis.com/. Feel free to experiment now with this (I promise!) easy-to-use tool. Detailed assignment instructions TBA. I also encourage you to take advantage of the University Writing Center’s personalized consultation services and other resources.

Oral Presentations
Twice during the semester, you (alongside at least one other student) will be responsible for starting off the
day's discussion by orally sharing the ideas you wrote about in your daily Reflection (see the description above) and offering 1-3 questions for class discussion based on the day's readings. These presentations can be somewhat informal, but they should be well organized, clear, and concise (under 5 minutes). You are encouraged to share images or make a connection to a news item. The best discussion questions will help us think critically and deeply about one of the readings and/or hone in on key connections across the readings. You might consider crafting a question for class discussion based around a specific quotation, chart, or image from one of the assigned readings.

You will also give a polished, professional, 5-minute presentation of the main argument and major take-aways of your Essay 2: Histories for a Hot Planet project. This will be followed by peer questions and feedback. Details TBA. The Sanger Learning Center provides free public speaking support for all UT students at its Public Speaking Center. I encourage you to take advantage of this resource.

### Grading System

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<tr>
<th>Grade</th>
<th>Percentage Range</th>
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<tr>
<td>A</td>
<td>100% to 94%</td>
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<tr>
<td>A-</td>
<td>&lt; 94% to 90%</td>
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<td>B+</td>
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<td>B</td>
<td>&lt; 87% to 84%</td>
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<td>B-</td>
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<td>C+</td>
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### Course Schedule

This syllabus represents my current plans. As we go through the semester, these plans may be adjusted to enhance class learning or to respond to the changing circumstances of the ongoing COVID-19 pandemic. I will communicate any such changes in class and through Canvas. Be sure to adjust your Canvas settings to receive notifications by email, or check your Canvas inbox and announcements daily. You will also use Canvas to communicate and collaborate online, check grades, and submit assignments. Readings should be completed before class, to be discussed in class on the date where they are listed below. The reading load for this course generally ranges from 50-70 pages per week; budget your time accordingly.

#### Unit 1: Deep Time and a Sense of Place

**Week 1: Introductions**

**Aug. 26** Read this syllabus.

Please complete the pre-course survey on Canvas. (Anonymous and ungraded!)

**Week 2: Grounding**


(Use the interactive tool to calculate your ecological footprint. This should take 5-10min.)


**Sept. 2** Hulme, "Preface" & "Chapter 1: What is Climate?"

Your primary "reading" for today is the campus landscape along Waller Creek. On your own or (highly recommended) with partners from class, talk this self-guided audio tour. It is about 1.9 miles long and takes about an hour. As you walk outside along this route, think about and connect the Hulme and Cronon readings to what you see and feel around you. Be ready to discuss your experience:


Week 3: Knowing

Sept. 7 Hulme, “Chapter 2: Historicising Climate” & "Chapter 3: Knowing Climate.”

Sept. 9 Watch: Kenner, Robert, dir. Merchants of Doubt. Sony Pictures Classics, 2014. (1h 36min)

Week 4: Earth Time

Sept. 14 Hulme, “Chapter 4: Changing Climates.”
Explore these visualizations:
"EarthViewer." HHMI BioInteractive. https://www.biointeractive.org/classroom-resources/earthviewer
"History of atmospheric carbon dioxide from 800,000 years ago until January, 2016." NOAA Earth System Research Laboratory. https://www.esrl.noaa.gov/gmd/ccgg/trends/history.html

Sept. 16 Guest Speaker: Prof. Jay Banner, Department of Geological Sciences
Hulme, “Chapter 5: Living with Climate.”


Browse this collection and choose at least one historical reconstruction tool and one future projection tool to explore in more depth (some do both).


Alternatively, you may explore this new tool from IPCC, which is more current and comprehensive, but a little more complex: https://www.ipcc.ch/report/ar6/wg1/#InteractiveAtlas

**Week 5: Human Time**

**Sept. 21**  
Hulme, “Chapter 6: Blaming Climate.”


**Sept. 23**  
Field Trip: Virtual Angkor (Details TBA)

DUE: “Place in Time” Essay


**Week 6: Sensing**

**Sept. 28**  
Hulme, “Chapter 7: Fearing Climate” & "Chapter 8: Representing Climate.”


Sept. 30  Field Trip: Blanton Museum of Art (Due to the early hour, this will be a virtual, in-class “visit.” I highly recommend visiting on your own before or after this meeting.)

Unit 2: Power Politics

Week 7: Fossil Capital
Oct. 7  DUE: Topic Proposal for “Histories for a Hot Planet” Essay
No required readings. Focus on your research for “Histories for a Hot Planet” and be ready to discuss your topic proposal and preliminary research.

Week 8: Crises (University Lecture Series)
Oct. 11, 7-8 p.m., "When Texas Froze Over." https://ugs.utexas.edu/uls.
Oct. 12  No required readings. Focus on your research for "Histories for a Hot Planet" and be ready to discuss the previous evening’s University Lecture.
No required readings. Be ready to discuss Tuesday evening’s University Lecture.

Week 9: Carbon Democracy
Oct. 21  Workshop: ExxonMobil Historical Collection, Briscoe Center for American History (Details TBA)
Banerjee, Neela, et al. "Exxon's Own Research Confirmed Fossil Fuels' Role in Global Warming Decades Ago," Exxon: The Road Not Taken, Inside Climate News. https://insideclimatenews.org/news/15092015/Exxons-own-research-confirmed-fossil-fuels-role-in-global-warming (Also click on at least 2 of the source links within the article and examine the original, primary source documents used as evidence for this article, from this collection: https://insideclimatenews.org/documents/.)

Week 10: Movements
Oct. 26  DUE: Outline and Draft Introduction for “Histories for a Hot Planet” Essay
Stratton, “Conclusion: Protest Energy.”
Choose a climate activist organization or movement to research. What are its goals? What methods does it use? What groups of people seem to be involved? In these respects, how does it compare with the historical cases of activism that we read about? Start with their own website or other online presence, but also use the research and media literacy strategies you have learned this semester. Be ready to share what you learned.

Unit 3: Living Futures

Week 11: Scenarios
Nov. 2  Hulme, “Chapter 10: Redesigning Climate” & “Chapter 10: Redesigning Climate.”

Nov. 4  Choose one of the solutions from this collection:
Read the “Solution Summary” and research more about it — the sources in the “Technical Summary” are a good place to start, but also use the research strategies you have learned this semester. Be ready to present your own brief assessment of this solution’s benefits, drawbacks, and feasibility.

Week 12: Governance
Nov. 9  DUE: Complete “Histories for a Hot Planet” Essay
Student Presentations
Hulme, “Chapter 11: Governing Climate.”

Nov. 11  Student Presentations

Week 13: Prophesy
Nov. 16  Hulme, “Chapter 12: Reading Future Climates.”
Oreskes and Conway 2014, ix-33.


Week 14: Imagine
Nov. 23  TBA

Nov. 25  Thanksgiving Holiday/Indigenous Peoples’ Day—No Classes. Please rest and reflect!

Week 15: Reflect
Nov. 30  DUE: “Future Histories” Essay

Dec. 2  TBA

“Histories for a Hot Planet” Essay, final revised version DUE Wednesday Dec. 15 (Exam Week)
Student Support and Policies:

Office Hours
I encourage you to meet with me to discuss your research, course material, or strategies for effective studying and writing. I will be available via Zoom during my office hours (see the top of the syllabus). You can also contact me to make an appointment to meet at a different time. If you wish to dispute a grade, be aware that re-grading may result in a lower score.

Services for Students with Disabilities
If you are a student with a disability, or think you may have a disability, and need accommodations please contact Services for Students with Disabilities (SSD). You may refer to SSD’s website for contact and more information: http://diversity.utexas.edu/disability. If you are already registered with SSD, please deliver your Accommodation Letter to me as early as possible in the semester so we can discuss your approved accommodations.

Writing Center
I strongly encourage you to use the services offered by the University Writing Center. The UWC offers 45-minute, one-on-one consultations with UT students on any piece of writing. You may visit up to three times per assignment. The consultants are well trained, and the cost of the service is covered in your tuition. If you wish to make an appointment, you may do so through the UWC website: uwc.utexas.edu.

The Sanger Learning Center
Did you know that more than one-third of UT undergraduate students use the Sanger Learning Center each year to improve their academic performance? All students are welcome to take advantage of Sanger Center’s classes and workshops, private learning specialist appointments, peer academic coaching, and tutoring for more than 70 courses in 15 different subject areas. For more information, please visit https://ugs.utexas.edu/slc.

Academic Integrity
Learning to cite sources appropriately is an important part of becoming a professional. Your writing should demonstrate what you are thinking and learning about the subject matter. You will need to clearly show which ideas in your writing come from others, and which are your contribution to the conversation. You must quote, paraphrase, summarize accurately, and cite outside sources correctly.

Using someone else's work in your own writing without giving proper credit is considered plagiarism, a serious form of academic dishonesty that can result in severe penalties. Copying someone else's work, buying a paper and submitting it as your own, copying and pasting text (even with changes), or borrowing images from an online source, are some examples of plagiarism. Even if you plagiarize accidentally, you can be held responsible and penalized. You can read the University's definition of plagiarism and other forms of academic dishonesty in Sec. 11–402 of the Student Conduct Code. For more information, visit the Dean of Students' site.

When you are unsure about citation, ask me what is appropriate in the context of your assignment. Consultants at The University Writing Center can also help you determine whether you are citing sources correctly. To understand what plagiarism is, its consequences, and how to avoid it, complete the Avoiding Plagiarism tutorial and quiz on Canvas before the first essay is due.
Electronic Devices
I encourage taking notes by hand, but you may use a laptop or e-reader for note-taking, viewing readings, and as specifically indicated for in-class workshops. To be fully attentive in class and avoid distracting your peers, put away your phone (turn off or set to silent). You may not check your email, do homework for other classes, or use electronic devices for any activities that are not part of our class. If you abuse your privilege to use electronic devices you will no longer be permitted to use them. Audio or video recording in class is not permitted without an SSD accommodation and my prior approval.

Weapons
If you see a gun, or any other weapon, you should leave the classroom and call 911. No weapons may be brought into the classroom, with the exception of licensed concealed handguns as per S.B. 11 (campuscarry.utexas.edu). My office is a gun free space; UT-Austin policy (HOP 8-1060, VII-C) allows me to give oral notice of my prohibition of handguns in my office. Be aware that “Campus Carry” is unaffected by Texas’s new “Permitless Carry” law. Handguns may only be carried by licensed holders on campus, and must be kept concealed on their person at all times.

Handguns may not be brought to the classroom in backpacks, bags, or purses. Students may be called upon at unpredictable times to move about the room to participate in group work or presentations, causing them to be separated from their belongings. University policy and the law would be violated by the separation of the gun owner from their weapon that would result from these required classroom activities.

Behavior Concerns and COVID-19 Advice Line
Do you have concerns about the behavior or well-being of another member of the campus community? Do you have questions about COVID-19 and need support or resources? If so, contact BCCAL at 512-232-5050 or submit your behavior concerns or COVID-19 questions online.

COVID-19 Safety
To help preserve our in-person learning environment, please:

• Stay informed about the City of Austin, CDC, and UT’s current guidance about masking, physical distancing, and other preventative measures. I will be following the strictest of these guidelines. You will keep yourself and your classmates safest if you do the same.
• Vaccinations are widely available, free, and not billed to health insurance. The vaccine will help protect against the transmission of the virus to others and reduce serious symptoms in those who are vaccinated.
• Proactive Community Testing is an important part of the university’s efforts to protect our community. Tests are fast and free.
• Download the Protect Texas Together App and use it each day you are on campus.
• Visit protect.utexas.edu for more information.