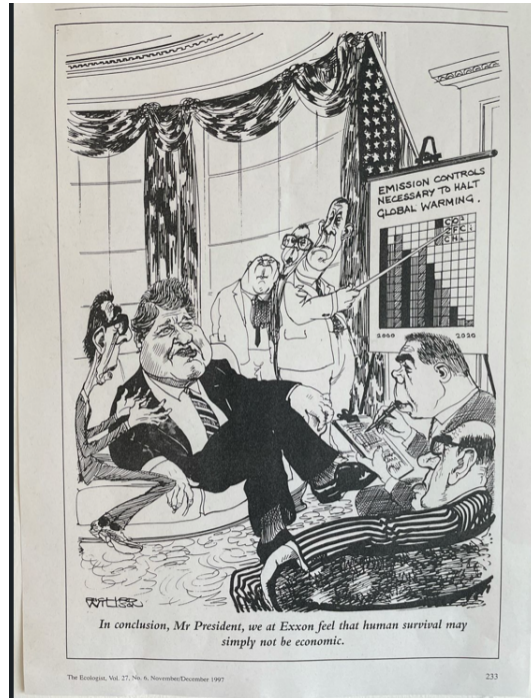


HMAN 1974S  
The Costs of Climate Change  
FALL 2021



**Instructor:** Dan Hirschman

**Email:** [daniel\\_hirschman@brown.edu](mailto:daniel_hirschman@brown.edu)

**Class Time:** 12:00pm-2:30pm, Mondays

**Class Location:** Pembroke Hall 003

**Office Hours:** Mondays 10-11am in 209 Maxcy Hall; Fridays 11am-Noon [by appointment](#) on Zoom.<sup>1</sup>

## Overview and Objectives

This seminar examines debates over the costs — economic, environmental, and social — of climate change. We will explore how economists attempt to solve seemingly impossible problems of valuation like: how much should we value the wellbeing of current versus future generations? How much value does the ecosystem as a whole provide? We will then survey

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<sup>1</sup>Please come to office hours if you'd like to chat about the course materials or assignments, or about college more generally, or any other topic you want to talk to me about. You don't need to have a "good" question or be struggling with the material — feel free to pop in just to say hello!

how these numbers (sometimes) enter into environmental regulatory debates. Finally, we will study how movements fighting for environmental justice adopt — or reject — the language of economics to make claims about the morality and economics of fossil fuel producers.

The topics for the final two weeks of the course will be chosen by the students through a democratic process. Once we've chosen those topics, I'll pick out readings (with your suggestions). I've listed some possible topics, but I am open to your suggestions as well!

This class does not assume that students have a deep background in natural science research around climate change. Many of our readings will offer introductory reviews of aspects of this science as part of their discussion of calculating climate impacts. That said, if you have never studied climate change before, you may wish to read a short primer on the natural science of climate change to help get you situated. I list some recommendations in the “optional texts” below.

Note: This syllabus is provisional and subject to change until the beginning of the semester.

## Compassion

Although the pandemic is under control in much of the United States, its consequences are still felt widely. And although the current political situation may feel less chaotic and terrifying than that of the recent past, serious and frightening challenges remain including the already felt costs of climate change and the daunting tasks ahead of eliminating greenhouse gas emissions, adapting to the new climate, and mourning all we cannot save. I hope you approach this semester through a lens of compassion: for yourself, for your fellow students, and for your instructors. I will endeavor to do the same.

## Requirements

*Readings:* This course is an upper-level seminar. As such, it carries a substantial reading load. You are expected to read all assigned material before coming to class. The majority of each class will be devoted to discussing the material in greater detail.

*Response Memos:* Most weeks, you are expected to write a 500 word response memo. This memo should discuss that week's reading, although it may focus on some readings more than others. The ideal response memo includes a brief summary of some of the major ideas in the readings, along with one or more of the following: thoughtful questions for discussion, critical commentary, connections to other readings, or connections to some current event or debate. Response memos are due by midnight on Sunday. You will be graded on your best seven response memos (meaning that you can “skip” a few weeks if you are satisfied with your grades).

*Attendance and Lateness:* You are required to attend all classes. Any unexcused absence beyond the second will affect your participation grade. Unexcused excessive lateness will be

counted as an absence. Absences for religious observances are excused, as long as you notify me in advance. Other absences will be excused with a doctor's note or a Dean's Note.

*Presentation:* Most weeks after the first, one or more students will lead off the class with a presentation. These presentations should last around 20 minutes, and include a handout with a summary of key terms and claims made in the readings. Each student will be expected to present once during the course of the term. We will discuss expectations for the presentations in class.

*Discussion:* During each class, the week's presenter will raise questions about the readings. We will also discuss issues raised in your response memos, as well as other ideas you have about the readings (e.g. connections to previous readings, relevance to contemporary issues, etc.). The material we cover can be challenging at times, but everyone has something to contribute to our discussion, even if you don't fully understand the particular reading in question. If you have a question, chances are that another one of your classmates has it too.

*Reflection Paper:* Once during the semester, you will write a 1000 word reflection paper. This paper will build on the course readings and discussions to make an argument of your choosing that demonstrates your mastery of some portion of the course material. The reflection paper will require you to bring together several readings from at least two different weeks into a coherent argument. The reflection paper covers the material in weeks 1-8 and is due Friday, 10/22.

*Final Project:* The course requires a final project. This project is very flexible. If you're not sure what to do, the default assignment will consist of a medium-length (2500-3000 word) paper on a topic of your choosing related to climate change and its social and economic impacts. But I would encourage you to think creatively. You might propose to record a podcast or video, draft a policy brief, do a literary analysis of climate fiction, write and submit an op-ed to a newspaper, etc. You are allowed, but not required, to work in groups on this project. No matter what you choose, you will be expected to do a small amount of outside research (equivalent to reading about one book or a few research articles) and to produce some individual written component (either a paper, or a reflection on and description of the project you completed). We will discuss the project in greater detail early in the semester. You must have your final topic approved by me by 12/6 (and ideally earlier). You will be required to circulate a rough draft (or equivalent) by 12/13. The final version of this project will be due on 12/20.

*Respect:* There are many ways to interpret the course readings in class and many competing views on the topics we will discuss, and I hope we will debate many contrasting viewpoints. We will be covering issues relevant to current contentious debates. To facilitate good discussion, please keep in mind that we are debating theories and evidence rather than each other as individuals. Please keep the difference in mind so that we can engage in useful and respectful discussion. I aim to treat all students with respect, and ask that you treat each other with respect as well.

Respect for each other is not the same thing as treating all viewpoints as equally valid. For example, I do not ask you to respect the position (promoted by fossil fuel companies for decades) that climate change isn't happening, or is happening but is not caused by anything

humans or doing, or is happening but is not going to cause problems for humans. These views are contradicted by the available evidence from a wide variety of natural and social scientific research. To show equal respect to the claim that climate change doesn't exist and the claim that it does would go against the purpose of research and education.

Although there are many points of consensus, there are also large zones of disagreement among scholars. For example, scholars disagree about the relative effectiveness of different forms of climate policy — carbon taxes, cap & trade, industrial policy, and more — with scholars mobilizing evidence to argue for contrasting positions. Research on climate change encompasses many different fields which are themselves not unified in their assessments and there is plenty of room for multiple opinions and perspectives. But again, not all. Many views are simply contrary to the overwhelming evidence. I will do my best to make it clear when I am presenting the consensus of the field and when I am presenting one of many competing perspectives and understandings.

*Deadlines and Late Work:* Because I use the response memos to help plan for class discussion, late response memos will not be counted. Any other work (reflection paper, final project) turned in by the last day of the semester (December 20) will be graded without penalty. The course deadlines are there to help you space out your work over the course of the term, and to help me plan the grading process. Work that is turned in by the associated deadline will be graded promptly. Work that is turned in significantly after the associated deadline may take longer to grade and may receive less detailed comments but, again, will not be penalized.

*Time Expectations:* You are expected to spend approximately 180 hours total to complete this class. Over the 12 weeks of term, students will spend 3 hours per week in class (36 hours). The required readings for each class are expected to take ~ 7 hours per week (84 hours). Finally, weekly response memos (1 hour each \* 10), reflection paper (6 hours), in-class presentation preparation (4 hours) and the final project (40 hours for researching, drafts, and editing) are estimated to take approximately 60 hours, for a total of 180.

## Grading

The grading rubric is as follows:

Attendance & Participation: 20%

Response Memos: 20%

Presentation: 10%

Reflection Paper: 10%

Final Project: 40%

Details on how each of these items are graded will be discussed in class.

## Administrative Issues & Support for Learning

*Accommodations for Learning:* Brown University is committed to full inclusion of all students. Please inform me early in the term if you have a disability or other condition that might require accommodations or modification of any of these course procedures. You may speak with me by email, before or after class, or during office hours. For more information, please contact [Student and Employee Accessibility Services](#) (phone: 401-863-9588, email: [SEAS@brown.edu](mailto:SEAS@brown.edu)).

*Academic and Personal Support:* Brown has many resources available to support you. The best starting place for accessing these resources is the Dean of the College's office. You can find more information about the Dean of the College's office [here](#), or you can email the Deans directly at [college@brown.edu](mailto:college@brown.edu). If you're not sure where to turn, start there, as the Deans are in charge of helping you navigate the array of resources available at Brown, including tutoring services and general academic study skills coaching. The Deans can also provide "Dean's Notes" that function a bit like doctor's note for non-personal health related issues (for example, if a family member gets sick and you miss coursework as a result, a Dean can issue a Dean's Note to inform your professors about the situation without having to get into details).

Additional support is available via the Counseling and Psychological Services ("CAPS") office. Information about CAPS is available [here](#), and you can contact them directly at [counseling@health.brown.edu](mailto:counseling@health.brown.edu). CAPS is typically very fast and usually has meetings available within one day.

If you would like more information about the resources available, you can ask me at any time this semester. You do not need to tell me why you are asking, and you can ask for more information to get help for a friend, another student, or yourself.

*Email Policy:* Please include "CCC" (for "costs of climate change") in the subject line of any email regarding the course. Doing so makes it easier for me to recognize course emails and process them quickly. I will try to respond to email within 24 hours during the week. If you do not receive a response within 48 hours, please send a follow-up email. Emails sent on Friday or during the weekend may be answered on the following Monday or Tuesday.

*Writing Expectations:* The University has many resources to help you with your writing, starting with the [Writing Center](#). In addition, I'm happy to offer feedback on the mechanics of writing a clear and well-argued paper.

*Academic Integrity:* Plagiarism and other forms of academic misconduct are unacceptable. Information on the University's academic integrity policy is available [here](#). Any student who plagiarizes will fail the course and will receive any other sanctions imposed by the University.

## Readings

### Required Texts

The course readings include a mix of articles and books, including both academic texts as well as short pieces from newspapers, magazines, etc. The required books are available electronically from the Brown library, and are also all available as relatively affordable paperbacks (by the standards of academic books) as well as ebooks. The books are listed in the order that you will need them, and I have provided links to the publisher's page from which you can usually find links for other online sites to buy them (including ebook and used copies). Additional readings are available as pdfs on the Course Canvas site and/or links to website. Please read the texts for each week before coming to class.

- Nordhaus, William. 2013. *The Climate Casino: Risk, Uncertainty, and Economics for a Warming World*. [Yale University Press](#). (\$20 new.)
- Elliott, Rebecca. 2021. *Underwater: Loss, Flood Insurance, and the Moral Economy of Climate Change in the United States*. [Columbia University Press](#). (\$30 new.)
- Cullenward, Danny and David Victor. 2020. *Making Climate Policy Work*. [Wiley](#). (\$23 new.)
- Aronoff, Kate, Alyssa Battistoni, Daniel Aldana Cohen, and Thea Riofrancos. 2019. *A Planet to Win: Why We Need a Green New Deal*. [Verso Books](#). (\$20 new.)

### Optional Texts

As noted above, students with little familiarity with the basic science of climate change may find it useful to read a short primer on the topic early in the course. I list a few options here; there are many others that would serve as well.

- Bauman, Yoram and Grady Klein. 2014. *The Cartoon Introduction to Climate Change*. [Island Press](#).
- Dessler, Andrew. 2021. *Introduction to Modern Climate Change*. 3rd edition. [Cambridge University Press](#).
- Emanuel, Kerry. 2018. *What We Know about Climate Change, Updated Edition*. [MIT Press](#).
- Mutter, John. 2020. *Climate Change Science: A Primer for Sustainable Development*. [Columbia University Press](#).

## Course Outline

### Week 1: Course Overview (9/13)

- Read the syllabus!
- Elliott, Rebecca. 2018. “The Sociology of Climate Change as a Sociology of Loss.” *European Journal of Sociology* 59(3):301-37.

### Week 2: Valuation and Commensuration (9/20)

- Ackerman, Frank, and Lisa Heinzerling. 2002. “Pricing the Priceless: Cost-Benefit Analysis of Environmental Protection.” *University of Pennsylvania Law Review* 150(5):1553.
- Espeland, Wendy. 1993. “Power, Policy and Paperwork: The Bureaucratic Representation of Interests.” *Qualitative Sociology* 16(3):297-317.
- Fourcade, Marion. 2011. “Cents and Sensibility: Economic Valuation and the Nature of ‘Nature.’” *American Journal of Sociology* 116(6):1721-77.

### Week 3: The Economics of Climate Change (Part 1: The Standard Model and Critiques) (9/27)

- Nordhaus, William. 2013. *The Climate Casino: Risk, Uncertainty, and Economics for a Warming World*. Pages tbd.
- Weitzman, Martin L. 2015. “A Review of William Nordhaus’ *The Climate Casino: Risk, Uncertainty, and Economics for a Warming World*.” *Review of Environmental Economics and Policy* 9(1):145-56.
- Keen, Steve. 2020. “The Appallingly Bad Neoclassical Economics of Climate Change.” *Globalizations*.

### Week 4: The Economics of Climate Change (Part 2: Discount Rates, Ethics & the SCC)(10/4)

- Roberts, David. 2012. “Discount rates: A boring thing you should know about (with otters!).” [Grist](#).
- Broome, John & Duncan Foley. 2016. “A world climate bank.” Pp. 156-169 In Axel Gossieries & Iñigo González-Ricoy (eds.), *Institutions for Future Generations*. Oxford University Press.
- Kelleher, Paul. 2019. “Ethics and The Social Cost of Carbon.” Lecture available [here](#).

Paul Kelleher will join our class via Zoom from 1-2:30pm.

## No Class 10/11!

### Week 5: The Economics of Climate Change (Part 3: Economics in Action) (10/18)

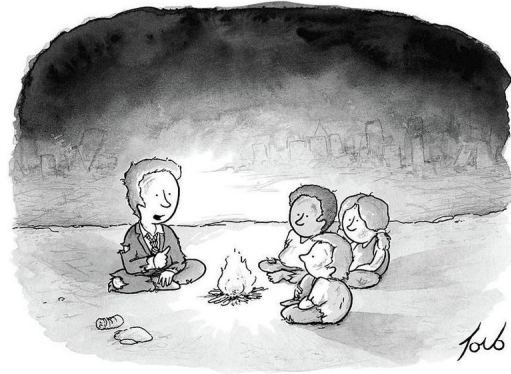
- Lamb, William F., Giulio Mattioli, Sebastian Levi, J. Timmons Roberts, Stuart Capstick, Felix Creutzig, Jan C. Minx, Finn Mller-Hansen, Trevor Culhane, and Julia K. Steinberger. 2020. “Discourses of Climate Delay.” *Global Sustainability*.
- Lomborg, Bjorn. 2020. “What is Global Warming Going to Cost Us?” Pp. 77-88 in *False Alarm: How Climate Change Panic Costs Us Trillions, Hurts the Poor, and Fails to Fix the Planet*.
- Franta, Benjamin. 2021. “Weaponizing Economics: Big Oil, Economic Consultants, and Climate Policy Delay.” *Environmental Politics*.
- Greenstone, Michael, Elizabeth Kopits, and Ann Wolverton. 2013. “Developing a Social Cost of Carbon for US Regulatory Analysis: A Methodology and Interpretation.” *Review of Environmental Economics and Policy* 7(1):23-46.
- Boushey, Heather. 2021. “A Return to Science: Evidence-Based Estimates of the Benefits of Reducing Climate Pollution.” [White House Council of Economic Advisers](#).

### Week 6: Financial and Physical Risks (10/25)

- Davenport, Carol and Kendra Pierre-Louis. 2018. “U.S. Climate Report Warns of Damaged Environment and Shrinking Economy.” *The New York Times*.
- Risky Business Project. 2014. “Risky Business: The Economic Risks of Climate Change in the United States.”
- Helm, Burt. 2015. “Climate Change’s Bottom Line.” *The New York Times*.
- Colgan, Jeff. 2018. “The Market is Valuing Climate Risk All Wrong.” [Global Policy Journal](#).
- Colgan, Jeff D., Jessica F. Green, and Thomas N. Hale. 2020. “Asset Revaluation and the Existential Politics of Climate Change.” *International Organization*.
- Clément, Régine. 2020. “Catalytic Capital.” Pp. 171-177 in *All We Can Save*.

Jeff Colgan will join our class in person, time TBD.





*“Yes, the planet got destroyed.  
But for a beautiful moment in time we  
created a lot of value for shareholders.”*

## **Week 7: Climate Change Divestment Movement (11/1)**

- McAdam, Doug. 2017. “Social Movement Theory and the Prospects for Climate Change Activism in the United States.” *Annual Review of Political Science* 20(1):189-208.
- Stokes, Leah. 2020. “A Field Guide for Transformation.” Pp. 337-347 in *All We Can Save*.
- Gunningham, Neil. 2017. “Review Essay: Divestment, Nonstate Governance, and Climate Change.” *Law & Policy* 39(4):309-24.
- Franta, Benjamin. 2017. “Litigation in the Fossil Fuel Divestment Movement.” *Law & Policy* 39(4):393-411.
- Franta, Benjamin. 2020. “Education of an Activist: Inside one student’s early days in the divestment movement.” [Sierra Club](#).
- Braungardt, Sibylle, Jeroen van den Bergh, and Tessa Dunlop. 2019. “Fossil Fuel Divestment and Climate Change: Reviewing Contested Arguments.” *Energy Research & Social Science* 50:191-200.
- Mormann, Felix. 2020. “Why the divestment movement is missing the mark.” *Nature Climate Change* 10: 1067-1068.

## **Week 8: Insurance and Loss (11/8)**

- Elliott, Rebecca. 2021. *Underwater: Loss, Flood Insurance, and the Moral Economy of Climate Change in the United States*.

- Flavelle, Christopher and Emily Cochrane. 2021. “Chuck Schumer Stalls Climate Overhaul of Flood Insurance Program.” [New York Times](#).

Rebecca Elliott will join our class via Zoom, 12-1pm.

## Reflection Paper 1 Due 11/12

### Week 9: Climate Policy 1 (Carbon Taxes & Regulation) (11/15)

- Mildenberger, Matto and Leah Stokes. 2020. “The Trouble with Carbon Pricing.” [The Boston Review](#).
- Majkut, Joseph. 2020. “The Immediate Case for a Carbon Price.” [Niskanen Center](#).
- Cullenward, Danny and David Victor. 2020. *Making Climate Policy Work*. Pages tbd.
- Bauman, Yoram. 2021. “Review of Making Climate Policy Work.” Available [here](#).
- Green, Jessica. 2021. “Beyond Carbon Pricing: Tax Reform Is Climate Policy.” *Global Policy* 12(3):372-79.

Yoram Bauman will join our class via Zoom, time TBD.

### Week 10: Climate Policy 2 (Green New Deal) (11/22)

- Aronoff, Kate, Alyssa Battistoni, Daniel Aldana Cohen, and Thea Riofrancos. 2019. *A Planet to Win: Why We Need a Green New Deal*. Verso Books.
- Gunn-Wright, Rhiana. “A Green New Deal for All of Us.” Pp. 92-104 in *All We Can Save*.
- Prakash, Varshini. 2020. “We Are Sunrise.” Pp. 187-193 in *All We Can Save*.

Alyssa Battistoni will join our class via Zoom, time tbd.

### Week 11: Topic 1 TBD (11/29)

Possible topics include:

- Environmental justice and the costs of climate change.
- Central banks and climate.
- Climate litigation.
- International climate finance.
- Rapid attribution and the changing discourse of climate disaster.

- Costs and the IPCC.
- Climate fiction.
- The social and environmental costs of renewables (e.g. lithium mining).
- The costs of mitigation (e.g. declining cost of solar).
- Climate policy in the early Biden Administration.
- Insurance companies & fossil fuel projects.
- Reinsurance, catastrophe bonds, and natural disasters.
- Media coverage of climate change and its costs.
- The costs of climate and climate action at Brown.
- Geoengineering.
- Local climate policy - RI & New England.

**Week 12: Topic 2 TBD (12/6)**

As week 11 above.

**Final Project Topic Approved by 12/6**

**Final Project Draft to Circulate by 12/13**

**Final Project Due 12/20**