

PS M152/IDS M150: The Politics of Climate Change

T-Th 3:30-4:45

Fall 2020

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office hours: Wednesdays 1-2:30 and Fridays 12:30-2

Course description

This course will help explain how governments at the international, national, and regional levels are addressing – or not addressing – the extraordinary challenge of climate change. To simplify our focus we will narrow our scope in two ways: by concentrating on the challenge of *mitigating*, rather than *adapting to*, climate change; and by concentrating on emissions from fossil fuels, rather than from agriculture, forestry, or land use.

Recorded lectures will be posted online at class time (Tuesdays and Thursdays at 3:30) and must be viewed within the next 30 hours. Students must also participate in discussion sections, which will be synchronous.

Learning objectives

This course will teach you about some of the key problems, concepts, events, actors, and institutions, in the analysis of climate politics. It should also help you become more skillful listeners, thinkers, writers, and speakers. It presumes no special knowledge about the science of climate change.

We will address three broad questions.

First, *how will climate change affect the governance of countries, and the livelihoods of people, around the world?* To address this question we'll cover research on the projected impact of climate change on economic growth, inequality, migration, and violent conflict.

Second, *why have governments made so little progress in reducing carbon emissions?* To help answer this question we'll discuss the problem of governing common pool resources, the challenge of issues that have long-term and irreversible effects, the reasons why the fossil fuel industry is so influential, the role of public opinion and climate denialism, and the unequal economic effects of climate change on different populations.

Finally, *what policies should governments adopt?* In the final unit we will consider alternative policy options, including carbon pricing, cap-and-trade, renewable energy portfolios, geo-engineering, technological innovation, and the role of international agreements. You will also be introduced to some of the tools used to evaluate alternative pathways, such as integrated assessment models.

On completing the course, you should better understand the causes, likely consequences, and policy implications of climate change, and hence be able to speak and write more intelligently about it. You should also grow more sophisticated in your ability to evaluate evidence, and to distinguish between scientifically-based reasoning and conjecture, popular beliefs, and magical thinking. Finally, you should gain a better understanding of how research on climate change – in both the natural and social sciences – is carried out, and grow more comfortable reading articles in scientific journals.

Format

This class will combine recorded lectures with synchronous discussion sections. I have underlined the activities below that will be the basis of your grade.

- I will post recorded lectures twice a week, near the beginning of each “class period” (Tuesdays and Thursdays at 3:30 pm). The lectures will be broken up into three or four 15-30 minute videos, so you can more easily absorb them.
- After each lecture, you must take a short quiz to make sure you’ve watched and paid attention to it. Once you begin the exam, you’ll have 5 minutes to answer three multiple choice questions. You must take the quiz within 30 hours of the time the lecture is posted (9:30 pm Pacific Time the day after class).
- The sections will be conducted synchronously – you must attend them in real time through Zoom. Attendance is mandatory and you’ll be graded on your participation. If you are living in a time zone far from the West Coast (e.g., in Europe, Africa, or Asia), make sure you are enrolled in a section you can join.
- Within the sections, you’ll be divided into smaller “working groups” of 4 or 5 people each. Working groups will have group assignments that are due before each week’s section, so you will want to meet or communicate separately. Your TAs will assign you to groups, explain how they’ll work, and give you the assignments.
- There will be two open-book midterms and a final exam, all made up of both timed exams and a short essay. If you want to skip the final exam, you can do so without penalty. If you take it, it will be on a no-harm basis: it may improve your pre-existing grade but won’t damage it.

Grades

There will be a short quiz after each lecture, which will be graded on a P/NP basis. The lecture quizzes must be completed within 30 hours after posting – that is, by 9:30 pm (Pacific) the next day. You’ll have to answer three questions in five minutes, and you won’t be able to pause the exam, so make sure you’re ready. Before or during the quiz you can consult your notes or the lecture slides (which will be posted).

Quizzes will be graded on a pass/fail basis: if you answer two out of three questions correctly, you will pass. They are easy to do (if you have watched the lecture and taken notes). Their purpose is to help you follow the lectures and stay on track. If you are ill or just having a bad week, don’t worry: you can skip or drop *three* of the quizzes without penalty. Moreover, there is a chance to earn extra credit: at the end of the quarter, two

bonus points will go to the student(s) with the highest number of correct quiz answers *before* dropping any quizzes.

Your TAs will explain the Working Groups and how their work will be graded.

There are three open-book tests – two midterms and an final exam – each of them worth 20 percent of your grade. All will feature both timed multiple-choice exams about the readings, and a short essay. The midterms will be held on October 29 and November 19, and the final exam can be taken anytime from December 11 to December 13. *The final exam will be given on a voluntary, no-harm basis: it will not reduce your final grade and can be skipped if you wish.*

Grades will be calculated as follows:

Midterm 1:	20%
Midterm 2:	20%
Final Exam:	20%
Lecture quizzes:	10%
Working groups:	10%
Section Participation:	20%

Numeric scores will be translated into letter grades as follows:

A+:	>98.5	B:	81.5-88.5	C-:	70.0-71.5
A:	91.5-98.5	B-:	80.0-81.5	D+:	68.5-70.0
A-:	90.0-91.5	C+:	78.5-80.0	D:	60.0-68.5
B+:	88.5-90.0	C:	71.5-78.5		

I do not grade on a curve. Research on higher education suggests that grading on a curve creates unproductive levels of stress and competition without fostering greater learning. What matters is not how you do relative to your peers – I expect *everyone* to do well – but how well you master the material. If you ever feel like a test or assignment is unfair, please come speak with me so I can address your concerns as soon as possible. I'm committed to assessing all students in a fair, inclusive, and comprehensive way.

You are welcome to take this course either for a letter grade *or* on a P/NP basis. Also, you now can switch from a letter grade to P/NP as late as 10th week without a petition, and take multiple P/NP courses in a single quarter. I encourage you to begin the course on a letter grade basis, and switch later to P/NP if you wish to.

Absences

Section attendance is part of your participation grade. Still, there will be times when some of you cannot attend due to illness or unavoidable conflicts. With your TA's permission, you can still receive credit for that week by submitting a short (2-3 page) essay reflecting on the week's readings.

Readings

Everyone should complete the week's readings before attending section. *You do not need to buy any readings:* everything is available on the [course web site](#) or through posted links.

TAs

We have four Teaching Assistants who will lead the sections; working with them is an integral part of the course. They are also available to help you understand the course material, answer questions, and help you with any logistical or grading problems. They are:

Arseniy Samsonov	asamsonov94@ucla.edu
Julian Michel	julianmichel@ucla.edu
Lorena De La Puente Burlando	lorena.delapuenteburlando@gmail.com
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Intellectual property notice

All of the course materials that I have prepared, including the lectures, videos, slides and exams, are my property alone and protected by state common law and federal copyright law. This includes all of the video lectures, tests and quizzes, which are for your use in this course only and shall not be shared or distributed without my written consent. Students shall not sell or distribute notes, or receive remuneration for taking notes, without my written consent.

Academic Integrity

As a student and a member of the University community, you are expected to demonstrate integrity in all of your academic endeavors. Accordingly, all work you do will be held to the highest ethical and professional standards.

Violations of academic integrity include, but are not limited to: cheating, fabrication, plagiarism, multiple submissions, or facilitating academic dishonesty. If you are unsure of what any of these entail, please consult the university guidelines below or ask me or your TA. *If you are even suspected of violating these standards, I am obliged to refer your case immediately to the Dean of Students, who will carry out an investigation.*

Please carefully review the university guidelines regarding academic dishonesty. They are at <http://www.deanofstudents.ucla.edu/Portals/16/Documents/StudentGuide.pdf>.

October 1: Introduction to the course

October 6: Key facts about fossil fuels, energy, and climate change (I)

Intergovernmental Panel on Climate Change (IPCC) (2014), *Summary for Policymakers and Technical Summary*, pp. 37-49.

Recommended:

* David Wallace-Wells (2017), *The Uninhabitable Earth (Annotated Edition)*, New York, July 10, 2017

October 8: Key facts about fossil fuels, energy, and climate change (II)

The Royal Society (2017), "Climate updates: What have we learnt since the IPCC 5th Assessment Report?"

Naomi Oreskes and Erik Conway (2013), "The Collapse of Western Civilization: A View from the Future," *Daedalus*, 143 (1).

October 13: Climate Ethics and Inequality

Simon Caney (2012), "Just Emissions," *Philosophy and Public Affairs*, 40:4.

Michael F. Maniates (2001), "Individualization: Plant a Tree, Buy a Bike, Save the World?" *Global Environmental Politics* 1(3).

Recommended:

* Noah Diffenbach and Marshall Burke (2019), "Global Warming has increased global economic inequality," *Proceedings of the National Academy of Science*.

* David Foster Wallace (2004), "Consider the Lobster," *Gourmet*.

October 15: How does climate change affect economic welfare?

Marshall Burke, Solomon M. Hsiang, and Edward Miguel (2015), "Global non-linear effect of temperature on economic production," *Nature* 527.

October 20: How does climate change affect conflict?

Solomon M. Hsiang, Marshall Burke, Edward Miguel (2015), "Quantifying the Influence of Climate on Human Conflict," *Science* 341(6151).

Recommended:

* Tamma A. Carleton and Solomon M. Hsiang (2016), "Social and economic impacts of climate," *Science* 353(6304).

* Office of the Under Secretary of Defense for Acquisition and Sustainment (2019), "Report on Effects of a Changing Climate to the Department of Defense," Department of Defense, January.

October 22: How does climate change affect migration?

Colin P. Kelley, Shahrzad Mohtadi, Mark A. Cane, Richard Seager, and Yochanan Kushnir (2015), "Climate change in the Fertile Crescent and implications of the recent Syrian drought," *Proceedings of the National Academy of Sciences*, 112 (11): 3241-3246.

October 27: Why have governments done so little to limit carbon emissions?

Garrett Hardin (1968), "The Tragedy of the Commons," *Science* (162).

UN Environment Programme (2019), *Emissions Gap Report 2019*, Executive Summary (pp. XIV-XXV).

Recommended:

* Matto Mildemberger (2019), "The Tragedy of 'the Tragedy of the Commons,'" *Scientific American*.

October 29: Midterm 1

November 3: How can we make a difference locally?

David G. Victor, Ahmed Abdulla, David Auston, Wendell Brase, Jack Brouwer, Karl Brown, Steven J. Davis, Carrie V. Kappel, Alan Meier, Mark Modera, Rebecca Zarin Pass, David Phillips, Jordan Sager, David Weil and TomKat Natural Gas Exit Strategies Working Group (2018), "Turning Paris into reality at the University of California," *Nature Climate Change* 8:174-185.

November 5: Why is the fossil fuel industry so influential?

John Cook et al. (2019), *America Mised: how the fossil fuel industry deliberately misled Americans about climate change*, George Mason University Center for Climate Change Communication.

Recommended:

* Will Steffen, Wendy Broadgate, Lisa Deutsch, Owen Gaffney and Cornelia Ludwig (2015), "The trajectory of the Anthropocene: The Great Acceleration," *The Anthropocene Review*, 2(1):81-98.

November 10: What do people believe about climate change and why?

Dave Roberts (2016), "This one weird trick will not convince conservatives to fight climate change," *Vox*.

Chad Zanolco, Hilary Boudet, Roberta Nilson, Hannah Satein, Hannah Whitley, and June Flora (2018), "Place, proximity, and perceived harm: extreme weather events and views about climate change," *Climatic Change* 149: 349-365.

Recommended:

* Larry Bartels (2008), "The Irrational Electorate," *The Wilson Quarterly*, Autumn.

* Patrick Egan and Megan Mullin (2017), "Climate Change: US Public Opinion," *Annual Review of Political Science*, 20:209-227.

November 12: What are the main decarbonization policies?

Nicolas Kosoy, Peter G Brown, Klaus Bosselmann, Anantha Duraiappah, Brendan Mackey, Joan Martinez-Alier, Deborah Rogers and Robert Thomson (2012), "Pillars for a flourishing Earth: planetary boundaries, economic growth delusion and green economy," *Current Opinion in Environmental Sustainability*, 4:74-79.

Recommended:

* Kenneth Gillingham and James H. Stock (2018), "The Cost of Reducing Greenhouse Gas Emissions," *Journal of Economic Perspectives*, 32:4, 53-72.

November 17: Can carbon taxes work?

Carbon Brief (2019), "Explainer: How Shared Socioeconomic Pathways explore future climate change."

Carbon Brief (2019), "Q&A: How 'integrated assessment models' are used to study climate change."

Endre Tvinnereim and Michael Mehling (2018), "Carbon pricing and deep decarbonisation," *Energy Policy* 121: 185-189.

Recommended:

* Jessica Green (2017), "Don't link carbon markets," *Nature* 543.

* *Jesse D. Jenkins (2014), " Political economy constraints on carbon pricing policies: What are the implications for economic efficiency, environmental efficacy, and climate policy design?" Energy Policy 69:467-477.*

November 19: Midterm 2

November 24: What policies have been tried in the US?

Matto Mildenerger (2020), *Carbon Captured: how business and labor control climate politics*, (MIT Press), chapter 5.

Recommended:

* *Matto Mildenerger (2020), Carbon Captured: how business and labor control climate politics, (MIT Press), chapter 4.*

* *California Green Innovation Index (2019).*

December 1: How much can international agreements help?

Robert O. Keohane and Michael Oppenheimer (2016), "Paris: Beyond the Climate Dead End through Pledge and Review?" *Politics and Governance*, 4.

Recommended:

* *Robert O. Keohane and David G. Victor (2016), "Cooperation and discord in global climate policy," Nature Climate Change.*

* *Jon Hovi, Detlef Sprinz, Hakon Saelen, and Arild Underdal (2016), "Climate Change Mitigation: a role for climate clubs?" Palgrave Communications.*

December 3: Can geoengineering save us?

Edward Parson (2017), "Climate policymakers and assessments must get serious about climate engineering," *Proceedings of the National Academy of Sciences*, 114(35):9227-9230.

December 8: Why do governments subsidize fossil fuels?

Umair Irfan (2019), "Fossil fuels are underpriced by a whopping \$5.2 trillion," *Vox*, May 17.

Dave Roberts (2018), "We now have a dollar value for one of the world's biggest subsidies," *Vox*, September 21.

Recommended:

Paasha Mahdavi, Cesar B. Martinez-Alvarez, and Michael L. Ross (2020), "Why Do Governments Tax or Subsidize Fossil Fuels?" Working paper.

December 10: What is the best path forward?

Jonas Meckling, Nina Kelsey, Eric Biber, and John Zysman (2015), "Winning coalitions for climate policy," *Science*, 349 (6253).

Dave Roberts (2020), "How to drive fossil fuels out of the US economy, quickly," *Vox*, August 6.

December 11-13: Final exam