CLIMATE CHANGE LAW & POLICY

ENV_R 390, Sec. 22

WINTER 2024 ■ MW: 12:30-1.50PM

Harris Hall 028

Dr. Wil Burns
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Office hours: by appointment (Zoom or phone): https://calendly.com/wil_burns
"Live office hours" also available, just contact me via email to schedule. I am in Scott Hall #307.

rse Overview

Climate change is the keystone environmental issue of this generation, and most likely for many generations to come. It now appears inevitable that temperatures will increase this century by more than 2ºC, and perhaps by substantially more than 3ºC, with the inertia of the system ensuring that temperatures will continue to increase for centuries thereafter even under scenarios of total decarbonization. Climate change is already posing serious risks for both human institutions and natural ecosystems. These risks will seriously escalate throughout this century, especially if the world community fails to substantially increase its commitment to addressing greenhouse emissions, inadequately allocates resources to adaptation, or, perhaps, fails to commit itself to technological approaches to remove carbon from the atmosphere.

This course examines the potential role of the law in confronting climate change from an institutional and policy perspective, examining the role of treaties, national legislation (in the United States), sub-national responses and judicial and quasi-judicial fora. Among the topics that will be addressed include the science associated with climate change, the role of key international climate treaty regimes, including the United Nations Framework Convention on Climate Change and the Paris Agreement, national and state and local responses to climate change in the United States, the role of litigation in confronting major emitters, and the potential role of climate geoengineering approaches. It will also seek to help students develop

critical skills of analysis of treaty provisions, legislative language, and court decisions, public speaking and cogent writing.

ning Objectives

After taking this course you should be able to:

- Identify the primary causes of anthropogenically-driven climate change and likely impacts;
- Identify and assess the operation and effectiveness of key elements of international climate treaty regimes;
- Understand the role of national and sub-national legislation and regulations in addressing climate change in the United States;
- Develop the ability to brief judicial decisions, with an emphasis on identifying the courts' key holdings and rationale, as well as learning to assess the merits of the courts' reasoning;
- Assess the potential risks and benefits of climate geoengineering approaches, and potential avenues for governance of research and/or potential deployment of such options.

s Contract

I am pretty "old-school" when it comes to how I view higher education. I do not consider students to be atomistic "customers" purchasing a "product," and I am not simply here to be a vendor of a "product." Rather, by enrolling in this course, you and I are entering into a social contract with each other, and with all the other students in the class, to foster an environment of learning and collaboration. Under the "terms" of this contract, it is my responsibility to always be well-prepared for class, responsive to communications outside of class, and to treat every student with fairness and respect. Consistent with this, I will always try to be accessible and try my best to return graded materials after no more than a week. In turn, by enrolling in the class students agree to: (1) attend classes regularly and punctually; (2) participate by asking questions and joining in class discussions; (3) read the assigned material and complete assignments on time; (4) Regularly consult the course Canvas site for updates and materials intended to facilitate class discussion, including current events pertinent to the topics we will discuss in class; (5) comply with class policies established in this syllabus, and (6) uphold Northwestern University's commitment to academic integrity: https://www.northwestern.edu/provost/policies/academic-integrity/

vidual Meetings

My office hours this quarter will be by appointment, just click on one of the links below and it will facilitate reserving a place on my calendar. We can also meet for live office hours by appointment. My office is in Scott Hall #307.

- 15-minute phone call: https://calendly.com/wil_burns/15min
- 30-minute phone call: https://calendly.com/wil_burns/30min
- 15-30-minute Zoom call: https://calendly.com/wil_burns/30-minute-zoom-call
- 30-60-minute Zoom call: https://calendly.com/wil_burns/60min

rse Readings

The readings for the course will be derived from the following sources, designated in the class schedule with the icons listed below:

- **Electronic readings**, which are available on the course Canvas site for this course. Click on the "Files" link and look for the "Readings" folder.
- **Online Hyperlinks**, which must be accessed via the online version of the Syllabus on the course Canvas site.

essment/Assignment Schedule

Mid-Term Examination	**2.7-2.9**	**30**
Final Examination	**3.11-3.13**	**50**
Class Participation	**Ongoing**	**20**

f Description of Assignments

Participation [20% of grade]

Class participation assessment will be comprised of your participation during lectures, including responses to treaty-interpretation questions.

erm Examination [30% of grade]

The mid-term examination will be a 48-hour take-home, comprised of essay questions, with a page limit for each question. More details about the structure of the exam will be provided in class. The examination will be available from 10am on 2.7 until 10am on 2.9.

Examination [50% of grade]

The mid-term examination will be a 48-hour take-home, comprised of essay questions, with a page limit for each question. More details about the structure of the exam will be provided in class. The examination will be available from 10:00 am on 3.11 and must be submitted by 10:00 am on 3.13.

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GRADING:

All grades will ultimately be scaled to a 100-point system: A (94-100); A- (90-93); B+ (87-89); B (83-86); B- (80-82); C+ (77-79); C (73-76); C- (70-72); D (60-69); F (<60).

ACADEMIC INTEGRITY

Academic integrity is taken very seriously at Northwestern. Students are responsible for reading and understanding Northwestern's Academic Integrity policies. All suspected violations will be reported to the McCormick College of Engineering's Dean's Office. These include cheating, plagiarism, fabrication, unfair advantage, unauthorized collaboration, and aiding and abetting of academic dishonesty. Students found in violation of academic integrity may receive a zero on the assignment or a failing grade for the course and may be suspended or permanently expelled from the University. See Academic Integrity: A Basic Guide for more information.

A couple of specific aspects of academic integrity:

1. **Plagiarism**

   Plagiarism is taking someone else's ideas and presenting them as your own. You could do this in many ways including buying a paper from the Internet or quoting someone without using quotation marks or acknowledgement. What if you used your own words, but the idea came from an article you read? If you don't cite the article as the source of the ideas, you are guilty of plagiarism.

   Should you have any questions about what is and is not acceptable use, ask me. Also I would highly recommend reviewing Northwestern's resources on academic integrity for guidance on

how to properly use and credit research in your work: http://www.northwestern.edu/provost/policies/academic-integrity/.

2. **The Use of Artificial Intelligence**

You may use AI programs (e.g. ChatGPT) to help generate ideas and brainstorm. However, please note that the material generated by these programs may be inaccurate, incomplete, or otherwise problematic. Beware that use may also negatively affect your own independent thinking and creativity. You may not submit any work generated by an AI program as your own. If you include material generated by an AI program, it should be cited like any other reference material (with due consideration for the quality of the reference, which may be poor or not even real).

Suspected violations of academic integrity will be reported to the Dean's Office. For more information on Northwestern's academic integrity policies, see: http://www.weinberg.northwestern.edu/handbook/integrity/index.html.

ZOOM ETIQUETTE:

- All students should have their cameras on during all online sessions, including, especially, in classes where we have guest speakers;
- Mute your microphones at all times when not speaking, and please try to minimize potentially distracting background noise;
- Dress like you are coming to class, i.e., no pajamas

ACCOMODATION:

Any student requesting accommodations related to a disability or other condition is required to register with AccessibleNU (accessiblenu@northwestern.edu; 847-467-5530) and provide professors with an accommodation notification from AccessibleNU, preferably within the first two weeks of class (**by January 25**). All information will remain confidential.

	COURSE SCHEDULE
1.3 **Live Class Session**	**Introduction to Course** ▪ Instructor introduction; ▪ Review of syllabus

SECTION 1	**The Science of Climate Change**
1.8 **Asynchronous : Video Lecture**	**Overview of Climate Change Science** **READINGS** ▪ O IPCC, AR6 Climate Change 2021: The Physical Science Basis 7-35 (2021) ▪ O Harvey, The places at greatest risk from extreme heat, E&E News, Apr. 27, 2023 ▪ O Nuccitelli, How climate change is affecting every U.S. region, Yale Climate Connections, Nov. 20, 2023 ▪ O Anderson, Climate change deniers argue that the world is cooling, The Infinite University: Medium, May 5, 2023 ▪ O Gavin, More solar shenanigans, RealClimate, Mar. 7, 2024
SECTION 2	**International/Regional Legal Responses to Climate Change**
1.10 **Live Class Session**	**The United Nations Framework Convention on Climate Change (UNFCCC), Part 1** **READINGS** ▪ O Text of the United Nations Framework Convention on Climate Change (1992) ▪ E WOLD, HUNTER & POWERS, CLIMATE CHANGE AND THE LAW, Ch. 4, *The UNFCCC* (2009), at pp. 149-184 ▪ O McGrath, Climate change: 'Monumental' deal to cut HFCs, fastest growing greenhouse gases, BBC, Oct. 15, 2016 **STUDENT LEARNING EXERCISE** Please have access during class to the **United Nations Framework Convention on Climate Change Treaty Interpretation Exercise,** which can be found in the "Treaty Interpretation Exercises" folder on the course Canvas site, and the text of the UNFCCC. These materials are also available in the Module for this class session. We will use these materials for our in-class group exercise.
	NO CLASS
1.17 **Live Class Session**	**The United Nations Framework Convention on Climate Change (UNFCCC), Part 2** **READINGS**

	▪ **No additional readings** **STUDENT LEARNING EXERCISE** Please have access during class to the **United Nations Framework Convention on Climate Change Treaty Interpretation Exercise,** which can be found in the "Treaty Interpretation Exercises" folder on the course Canvas site, and the text of the UNFCCC. These materials are also available in the Module for this class session. We will use these materials for our in-class group exercise.
1.22 **Asynchronous : Video Lecture**	**The Kyoto Protocol** **READINGS** ▪ O Text of the Kyoto Protocol (1995) ▪ E WOLD, HUNTER & POWERS, CLIMATE CHANGE AND THE LAW, Ch. 5, *Introduction to the Kyoto Protocol* (2009), at pp. 205-221 [from Section III] ▪ E de Cendra de Larragán, T*he Kyoto Protocol, with a special focus on flexible mechanisms*, CLIMATE CHANGE LAW 227-36 (2016)
1.24 **Live Class Session**	**The Paris Agreement, Part 1** **READINGS** ▪ E Text of the Paris Agreement (2015) ▪ E Rajamani & Werksman, *The legal character and operational relevance of the Paris Agreement's temperature target,* 376 PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY A 1-4 (2018) ▪ E Obergassel, et al., *Turning Point Glasgow? An Assessment of the Climate Conference COP26*, 15(4) CARBON & CLIMATE LAW REVIEW 271-281 (2021) ▪ O Eisen, et al., Rights, Carbon, Caution: Upholding Human Rights under Article 6 of the Paris Agreement, CIEL (2021), at 1, 7-20. **STUDENT LEARNING EXERCISE** Please have access during class to the **Paris Agreement Treaty Interpretation Exercise,** which can be found in the "Treaty Interpretation Exercises" folder on the course Canvas site, and the text of the Agreement. These materials are also available in the Module for this class session. We will use these materials for our in-class group treaty interpretation exercise.
1.29 **Live Class Session**	**The Paris Agreement, Part 2** **READINGS** ▪ O Harris, COP28: Loss and damage, fossil fuels and the limits of climate diplomacy, PLOS Climate, Jan. 23, 2024 **STUDENT LEARNING EXERCISE, continued**

	Please have access during class to the **Paris Agreement Treaty Interpretation Exercise,** which can be found in the "Treaty Interpretation Exercises" folder on the course Canvas site, and the text of the Agreement. We will use these materials for our in-class group exercise.
1.31 **Asynchronous : Video Lecture**	**Climate Adaptation and International Law** **READINGS** ▪ E Berrang-Ford, et al., *Tracking global climate change adaptation among governments*, 9 NATURE CLIMATE CHANGE 440-49 (2019) ▪ E Bhatasara & Nyamwanza, *Sustainability: a missing dimension in climate change adaptation discourse in Africa?* 15(1) JOURNAL OF INTEGRATIVE ENVIRONMENTAL SCIENCE 83-97 (2018) ▪ E Magnan & Ribera, *Global adaptation after Paris*, 352 SCIENCE 1280-82 (2016)
2.5 **Live Class Session**	**Loss & Damage under the Paris Agreement** **READINGS** ▪ E Burns, *Loss and Damage and the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change*, 22 ILSA JOURNAL OF COMPARATIVE & INTERNATIONAL LAW 415-433 (2016) ▪ E Broberg, *Interpreting the UNFCCC's provisions on 'mitigation' and 'adaptation' in light of the Paris Agreement's provision on 'loss and damage,'* 20(5) CLIMATE POLICY 527-32 (2020) ▪ E Byravan & Rajan, *Cross-border migration on a warming planet: A policy framework*, 13 WIRES CLIMATE CHANGE 1-9 (2022)
	Mid-Term Examination
2.12 **Live Class Session**	**Reductions of Emissions from Deforestation and Degradation (REDD+)** **READINGS** ▪ E Schmid, *Are forest carbon projects in Africa green but mean?: A mixed-method analysis*, 15(1) CLIMATE & DEVELOPMENT 45-59 (2023) ▪ E West, et al., *Action needed to make carbon offsets from forest conservation work for climate change mitigation*, 381 SCIENCE 873-878 (2023) ▪ O Pitts, Hess Inks $750 Million Carbon Credit Deal with Guyana, Hart Energy, Dec. 5, 2022
2.14 **Live Class Session**	**The Potential Role of a Carbon Taxes in Climate Policymaking**

	READINGS ▪ E Karceski, *Efforts to tax carbon in Washington State*, PLOS CLIMATE 1-14 (Oct. 2022) ▪ E Mann, *The Case for the Carbon Tax: How to Overcome Politics and Find Our Green Destiny,* 39 ELR 1-9 (2009) ▪ E *Record High Revenues from Global Carbon Pricing Near $100 Billion*, ESG News, May 23, 2023
SECTION 3	**Domestic Responses to Climate Change (United States)**
2.19 **Live Class Session**	**Federal Responses to Climate Change (United States), Part 1: Executive Authority to Regulate Greenhouse Gases** **READINGS** ▪ E West Virginia v. EPA (S.Ct. 2022), read only Majority Opinion, pages 7-31. **STUDENT LEARNING EXERCISE** Please brief the **U.S. Supreme decision of West Virginia v. EPA.** Use the "How to Brief a Case" template found in the "Case Briefing Exercises Folder" to brief the case. This materials are also available in the Module for this class session. You will NOT be submitting the briefing; we will just use your briefs as grist for an in-class exercise, so please do the brief in advance and have a copy in front of you to help facilitate discussion.
2.21 **Asynchronous : Video Lecture**	**Federal Responses to Climate Change (United States), Part 2: Executive Branch Responses from Obama to Biden** **READINGS** ▪ O Robles, A wild year for energy policy begins, Politico, Jan. 2, 2024 ▪ O Lashof, Tracking Progress: Climate Action Under the Biden Administration, World Resources Institute, Jan. 23, 2023 ▪ O Tigue, Most Americans Disapprove of Biden's Handling of Climate Change, Poll Shows, Inside Climate News, Aug. 28, 2023 O Sen, Biden's fossil fuel turn is bad politics – and even worse science, The Hill, May 17, 2023 ▪ O Woellert & Colman, SEC proposes landmark climate rule, Politico, March 21, 2022
SECTION 4	**The Potential Role of Climate Litigation to Drive Emissions Reductions**

2.26

Synchronous Online Class Session

The Potential Role of Climate Litigation in the United States and other Countries

READINGS

- E Butterfield, *The potential role of climate change litigation in furthering the mitigation objectives of the Paris Agreement*, 21 ASIA-PACIFIC LAW JOURNAL 29-49 (2018)
- O Bonasia, Montana Ruling 'Game Changer' for Climate Legal Action in the United States, Energy Mix, Aug. 16, 2023
- O de Wit, Urgenda Foundation v Netherlands: Historic climate change decision upheld, Norton Rose Fubright, Dec. 2019
- E *Puerto Rico Brings Class Action Climate Suit Against Fossil Fuel Firms*, InsideEPA, Dec. 5, 2022

Guest Speaker, Pat Parenteau, Professor, Vermont Law School, https://www.vermontlaw.edu/directory/person/parenteau-pat

- *Using the Courts to Save the Planet*

SECTION 5 "Plan B?": Climate Geoengineering Approaches

2.28

Live Class Session

Overview of Solar Radiation Management Geoengineering

READINGS

- O Buck & Nicholson, Solar geoengineering research in the global public interest: A proposal for how to do it, One Earth, Dec. 15, 2023
- E McLaren, *Mitigation deterrence and the "moral hazard" of solar radiation management*, 4 EARTH'S FUTURE 596-602 (2016)
- O Borenstein, The ethics of tinkering with the Earth's atmosphere to tackle climate change, Canada's National Observer, June 7, 2022

3.4

Live Class Session

Overview of Carbon Dioxide Removal Geoengineering

READINGS

- E Haszeldine, et al., *Negative Emissions Technologies and Carbon Capture and Storage to Achieve the Paris Agreement commitments,* 376 PHIL. TRANSACTIONS OF THE ROYAL SOCIETY, A 1-23 (2018)
- E Burns & Corbett, *Antacids for the Sea? Artificial Ocean Alkalinization and Climate Change*, 3 ONE EARTH 154-56 (2020)

Final Examination