

CLIMATE INTERVENTION LAW
Spring 2022
Course Number 25393
Section Number 5397

University of Houston Law Center
Fall 2022

Prof. Tracy Hester

Class Hours: Monday-Wednesday 10:30 am to 11:45 am

LAW200 and online via Zoom

Office Hours: I'll hold open office hours via Zoom on Tuesdays from 1:30 pm to 4:30 pm. You can also visit me in my office at LAW341K.

You can also reach me at 713-743-1152 or tdheste2@central.uh.edu to schedule a visit at any other time.

Course Description:

Climate change poses one of the greatest challenges of our time, but our legal and regulatory systems face enormous difficulties in responding to it. As a result, the consequences of climate change have inexorably grown while global emissions of greenhouse gases from human activity continue to accelerate. To help bridge the gap between increasing emissions and the pace of governmental and private action, the emerging field of climate intervention explores options to directly control or alter the environment in ways to offset or prevent climate change effects. These strategies, so far, have generally fallen into two categories: technologies that reduce the amount of solar radiation that reaches the Earth's surface, and methods that directly remove large amounts of greenhouse gases from the atmosphere. Both of these approaches pose unique challenges to environmental law and climate change regulatory policy.

This class is the first law school class offered in the United States on climate intervention law. We will explore how this nascent field of law will grow, and experiment with different approaches and frameworks that could apply to climate intervention initiatives under international law and under U.S. and state laws. As

part of that process, we will also discuss the growing field of climate change law in general and how it might interact with climate intervention work.

As an outcome of taking this class, you should be able to identify key regulatory issues and liability risks associated with climate intervention efforts and strategies to help manage those risks (including, if needed, halting a project entirely).

The class will use a combination of lectures, class discussions, case studies, in-class exercises and sample problems. Where possible, we'll discuss real-life proposed experiments and demonstration projects, and will reach out to bring key researchers to speak with us where possible.

Course Prerequisites: None. I will provide supplemental material and assistance to anyone who has questions about underlying environmental law doctrines and principles.

Course Materials:

The Law of Climate Engineering, ed. Michael Gerrard and Tracy Hester (2018) – I'll distribute chapters in class via electronic .pdfs.

In addition, I'll upload class handouts and supplemental materials to Blackboard, along with video and audio recordings of class lectures and discussions.

If you would like additional background orientation materials on environmental law, I can provide galley proof copies of *Mastering Environmental Law* (a short hornbook aimed at new environmental law practitioners) to students who request one.

Assignments

Our reading assignments will follow the course syllabus, although we may vary a bit in pace and coverage as the semester progresses (i.e., expect changes as we go). Of course, you should read each day's assigned materials in advance and be prepared to discuss them in class.

Class Participation

In general, I will treat you in class the same way that I'd treat you as a new attorney working for me at a law firm. So please be prepared to discuss the readings assigned for that day as well as to think creatively about how to apply

those materials to new situations and hypotheticals. I'll make sure that everyone has a chance to participate in the discussion before the semester's end. You will also have a limited number of opt-outs (no excuses necessary), but you can't get credit for the class unless you attend at least 80% of the sessions.

Assessments and Grading

Your grade in this class will be based on a take-home final examination. You will have eight (8) hours to complete the exam, although it should not take you more than three hours. You can use your personal notes or outlines that you create, your draft coursebook for this class, and any handouts. No other outside or outlines or briefs, please. We'll discuss the final exam's format and other issues later in the semester.

I'll adjust grades by one notch (i.e., a half-grade) based on class participation as merited. It works both ways - you can raise your grade with energetic and insightful participation, or you can lower it by consistently failing to prepare adequately for class.

Personal Resources

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to the demands of a professional program, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the "Let's Talk" program, a drop-in consultation service at convenient locations and hours around campus. Go to http://www.uh.edu/caps/outreach/lets_talk.html.

Discrimination and Sexual Harassment/Misconduct Policy

The University is committed to maintaining and strengthening an educational, working and living environment where students, faculty, staff, and visitors are free from discrimination and sexual misconduct. If you have experienced an incident of discrimination or sexual misconduct, there is a confidential reporting process available to you. For more information, please refer to the University system's Anti-Discrimination Policy SAM 01.D.07 and Sexual Misconduct Policy SAM 01.D.08, available here:

<http://www.uhsystem.edu/compliance-ethics/uhs-policies/sams/01-general-information/index.php>

http://www.uhsystem.edu/compliance-ethics/_docs/sam/01/1d7.pdf
(antidiscrimination)

http://www.uhsystem.edu/compliance-ethics/_docs/sam/01/1d8.pdf
(sexual misconduct)

Please be aware that under the sexual misconduct policy, SAM 01.D.08, faculty are required to report to the University any information received regarding sexual misconduct as defined in the policy. Please note that the reporting obligations under the sexual misconduct policy reach to employees and students. Also, as a required reporting party, Law Center employees and faculty members are not a confidential resource.

Recording of Class

Students may not record all or part of class, livestream all or part of class, or make/distribute screen captures, without advanced written consent of the instructor. If you have or think you may have a disability such that you need to record class-related activities, please contact the [Center for Students with DisABILITIES](#). If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform.

I will record all of our classes unless I specifically notify you otherwise. You may use my recordings for your own studying and notetaking, but the University does not authorize you to share them with *anyone* without my prior written approval. Per University policy, failure to comply with requirements regarding recordings will result in a disciplinary referral to the Dean of Students Office and may result in disciplinary action.

Syllabus Changes

Due to the changing nature of the COVID-19 pandemic, please note that I may need to modify the course syllabus and may do so at any time. I'll announce these changes as quickly as possible through direct emails to all of you as well as postings to the class BlackBoard site.

Week 1 (Aug. 22, 24)

Introduction to class; environmental justice overview

Assignments: Gerrard & Hester 1-25
 Overview, FIFTH NATIONAL CLIMATE ASSESSMENT
 REPORT (2020)

Week 2 (Aug. 29, 31)

DOJ Environmental Justice Listening Session; Introduction to climate science.

Assignment: Gerrard & Hester 28-51
 Readings on Blackboard

Week 3 (LABOR DAY HOLIDAY – class on Sept. 7 only)

Introduction to climate intervention technologies.

Week 4 (Sept. 12, 14)

Foundational principles of public international law, UN Framework Convention on Climate Change, Kyoto Protocol, Paris Agreement.

Project – large-scale CO₂ removal as compliance strategy for Paris Agreement.

Assignment: Gerrard & Hester 57-75, 115-131

Week 5 (Sept. 19, 21)

International climate change law and climate intervention: International Human Rights Law, Convention on Biological Diversity.

Project – field test of marine microbubbles technology.

Assignment: Gerrard & Hester 76-114

Week 6 (Sept. 26, 28)

Polar and glacial engineering, research governance; Ocean Engineering – UN Law of the Sea Convention, London Convention/ London Protocol.

Project – Antarctic glacial mooring.

Assignment: Gerrard & Hester 269-299, 224-236
D. Bodansky, *Arctic Climate Interventions*, 35 INT'L J. MARINE & COASTAL L. 1 (2020)
W. Burns and C. Corbett, *Antacids for the Sea? Artificial Ocean Alkalinization and Climate Change*, 3 ONE EARTH 154 (Aug. 21, 2020).

Week 7 (Oct. 3, 5)

Federal Law: Clean Air Act, National Weather Modification Act.

Project – ScopeX

Assignment: Gerrard & Hester 160-162, 175-179
ScopeX project description

Week 8 (Oct. 10, 12)

Federal Law: Endangered Species Act, National Environmental Policy Act.

Project – Florida coral protection.

Assignment: Gerrard & Hester 162-167, 154-159

Week 9 (Oct. 17, 19)

Federal Law: Clean Water Act, CERCLA/RCRA, Enhanced Weathering and Mineralization technologies

Assignment: Gerrard & Hester 179-191

Week 10 (Oct. 24, 26)

Tort liability, including transnational litigation

Assignment: Gerrard & Hester 167-175, 236-254; *Shell v. Rhode Island* (CTA1 2020)

Week 11 (Oct. 31, Nov. 2)

Emergency Authorities for climate intervention, including National Emergencies Act and Stafford Act; Environmental Equity and Just Transitions; legal bases of environmental justice claims.

Assignment: Gerrard & Hester 127-128, 167-175

Public Conceptions of Justice in Climate Engineering by McLaren et al. (2016)

Week 12 (Nov. 7, 9)

Make-up Lecture: guest colloquy with Prof. Nik Guggenberger on intellectual property issues in climate intervention technologies.

COP27 in Sharm El Sheik. Will attempt remote lecture from Egypt on current status of UN discussions on climate intervention options and governance.

Week 13 (Nov. 14, 16)

Corporate transactions: financial incentives (45Q, LCFS), border adjustment mechanisms, international trade limits, and corporate environment/social/governance measures.

Project: Oxy – Carbon Engineering joint venture

Assignment: Posted to Blackboard

Week 14 (Nov. 21, then Thanksgiving holiday break)

Regional Climate Intervention Strategies, and relevant Texas legal standards.

Week 15 (Nov. 28, 30)

Final Review session on Nov. 28. No class on Nov. 30.

REQUIRED AND RECOMMENDED PROVISIONS FOR SYLLABI UNDER UNIVERSITY OF HOUSTON SYSTEM

Required Language for Courses with a Face-to Face Component

If you are experiencing any COVID-19 symptoms that are not clearly related to a pre-existing medical condition, do not come to class. Please see [Student Protocols](#) for what to do if you experience symptoms and [Potential Exposure to Coronavirus](#) for what to do if you have potentially been exposed to COVID-19.

Required Language for All Courses

COVID-19 Information

Students are encouraged to visit the University's [COVID-19](#) website for important information including diagnosis and symptom protocols, on-campus testing, and vaccine information. Please check the website throughout the semester for updates.

Vaccinations

Data suggests that vaccination remains the best intervention for reliable protection against COVID-19. Students are asked to familiarize themselves with pertinent [vaccine information](#) and to consult with their health care provider. The University strongly encourages all students, faculty and staff to be vaccinated.

Reasonable Academic Adjustments/Auxiliary Aids

The University of Houston complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for disabled students. In accordance with Section 504 and ADA guidelines, UH strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them. If you believe that you have a disability requiring an academic adjustments/auxiliary aid, please contact [the Justin Dart Jr. Student Accessibility Center](#) (formerly the Justin Dart, Jr. Center for Students with DisABILITIES).

Recording of Class

Students may not record all or part of class, livestream all or part of class, or make/distribute screen captures, without advanced written consent of the instructor. If you have or think you may have a disability such that you need to record class-related activities, please contact the [Justin Dart, Jr. Student Accessibility Center](#). If you have an accommodation to record class-related

activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. Classes may be recorded by the instructor. Students may use instructor's recordings for their own studying and notetaking. Instructor's recordings are not authorized to be shared with *anyone* without the prior written approval of the instructor. Failure to comply with requirements regarding recordings will result in a disciplinary referral to the Dean of Students Office and may result in disciplinary action.

Syllabus Changes

Due to the changing nature of the COVID-19 pandemic, please note that the instructor may need to make modifications to the course syllabus and may do so at any time. Notice of such changes will be announced as quickly as possible through (*specify how students will be notified of changes*).

Recommended Language

Resources for Online Learning

The University of Houston is committed to student success, and provides information to optimize the online learning experience through our **Power-On** website. Please visit this website for a comprehensive set of resources, tools, and tips including: obtaining access to the internet, AccessUH, and Blackboard; requesting a laptop through the Laptop Loaner Program; using your smartphone as a webcam; and downloading Microsoft Office 365 at no cost. For questions or assistance contact UHOnline@uh.edu.

UH Email

Please check and use your CougarNet email for communications related to this course. To access this email, **login** to your Microsoft 365 account with your CougarNet credentials.

Webcams

Access to a webcam is required for students participating remotely in this course. Webcams must be turned on (*state when webcams are required to be on and the academic basis for requiring them to be on*). (Example: Webcams must be turned on during exams to ensure the academic integrity of exam administration.)

Title IX/Sexual Misconduct

Per the UHS Sexual Misconduct Policy, your instructor is a “responsible employee” for reporting purposes under Title IX regulations and state law and

must report incidents of sexual misconduct (sexual harassment, non-consensual sexual contact, sexual assault, sexual exploitation, sexual intimidation, intimate partner violence, or stalking) about which they become aware to the Title IX office. Please know there are places on campus where you can make a report in confidence. You can find more information about resources on the Title IX website at <https://uh.edu/equal-opportunity/title-ix-sexual-misconduct/resources/>.

Security Escorts and Cougar Ride

UHPD continually works with the University community to make the campus a safe place to learn, work, and live. Our Security escort service is designed for the community members who have safety concerns and would like to have a Security Officer walk with them, for their safety, as they make their way across campus. Based on availability either a UHPD Security Officer or Police Officer will escort students, faculty, and staff to locations beginning and ending on campus. If you feel that you need a Security Officer to walk with you for your safety please call [713-743-3333](tel:713-743-3333). Arrangements may be made for special needs.

Parking and Transportation Services also offers a late-night, on-demand shuttle service called Cougar Ride that provides rides to and from all on-campus shuttle stops, as well as the MD Anderson Library, Cougar Village/Moody Towers and the UH Technology Bridge. Rides can be requested through the UH Go app. Days and hours of operation can be found at <https://uh.edu/af-university-services/parking/cougar-ride/>.

Helpful Information

Coogs Care: <https://uh.edu/dsa/coogscare/>

Student Health Center: <https://www.uh.edu/healthcenter/>