

Syllabus

ENVR 475/775: Global Climate Change: Interdisciplinary Perspectives
Spring 2023
1 Credit

Course Description

This class addresses the complexity and importance of global climate change from several disciplines. A top expert will lecture each week, addressing several themes including the science of human influences on climate, impacts and adaptation, global energy and technology, communication, and economics and international solutions.

Prerequisites: None

Instructor

Jason West, PhD
Professor
Department of Environmental Sciences and Engineering
Office: Rosenau 140
Phone: 919-843-3928
Email: jjwest@email.unc.edu

Teaching Assistant:

None

Office Hours: Available by appointment.

Course Website: On Canvas, use your ONYEN and password.

Class Days, Times, Location:

Tuesdays 3:30-4:45 PM, Mitchell 0005

To participate online (with an explanation):

<https://unc.zoom.us/j/92004943261?pwd=Q3BpaE4vSFowMytkbWFpaXNhWFRaUT09>

Passcode: HotEarth

Course Format

Climate change has been called one of the most important issues of the 21st century. It is a defining challenge for the current generation of students. The Earth's climate is influenced by nearly all human activities. As the Earth's climate changes, it will have widespread effects on human societies and the world around us. Understanding and addressing the issue of global climate change requires interdisciplinary perspectives, as several physical sciences and social sciences interplay.

This course aims to increase understanding of global climate change by approaching it from an interdisciplinary perspective. Students will hear from top experts in a variety of fields on how they approach climate change. The course is organized around five inter-related themes:

- the **science** of climate change and of the human influence on climate,
- the **impacts** of climate change on human society and our environment, and means of adapting to climate change,
- global **energy**, and technological means of addressing climate change,
- **communication** of climate change, and
- climate change **policy** and international solutions.

Through this course, students will learn about our world and human interactions with it, and about the important and pressing issue of climate change. Students will also see how a complex issue like global climate change is approached from different disciplinary perspectives.

This course is designed to spark interest in climate change among students from a variety of majors across the entire UNC campus. The instructor hopes that some students will be inspired by this experience to continue to work on topics related to climate change through their own disciplines. Students who are majors in Environmental Science, or who already have a focus on climate change in their education, will also find this course worthwhile because of the high quality of speakers that we attract. A more comprehensive understanding of climate change or of particular aspects of climate change can be obtained through more focused classes in several departments.

The course format will consist of a seminar-style class that meets weekly. Students should complete the readings before class.

Required Readings

Readings will generally be short articles provided on the class Canvas site, including some articles listed as "Required" and others as "Optional". Please read those marked as "Required" before class each week. Either the required reading, the optional reading, or both should be used in writing essays.

Some readings are from the NY Times and UNC students can get free access here:

<https://guides.lib.unc.edu/nyt-academic-pass>

Course-at-a-Glance

The instructor reserves the right to make changes to the syllabus, including topics, readings, assignments, and due dates. Any changes will be announced as early as possible. The full course schedule is included on the last page of this Syllabus.

Course Assignments and Assessments

The instructor hopes that everyone will have a positive experience, and will interact during class asking questions. Comments about the class are welcome. Please be respectful of different viewpoints.

Attendance is mandatory. Students are permitted one absence during the semester with no consequence. **Students who have two or more absences will receive a grade of F for the class.** But there are ways to make up for absences (see below). The first class of the semester (Jan. 10) does not count in records of attendance.

To ensure that you are paying attention during class, polls will be given periodically and you're expected to answer. If you don't respond to the poll, you'll be marked absent for the class.

If you are sick or have been exposed to someone with COVID, please do not come to class. Instead participate online by zoom, and please send the instructor a short email explanation.

For in-person classes, attendance will be determined by completing a poll in PollEverywhere. All in-person classes will be zoomed for students who cannot attend and for the MPH online students. Students are responsible for registering their phones with Poll Everywhere, by Jan. 17, following instructions from <https://poll.unc.edu>. Be sure to log in to PollEverywhere before responding to the poll. If a student answers the poll when not present in class or participating on zoom (with an explanation), it will be treated as an attempt to cheat the poll, and will count as two absences. Repeated attempts to cheat will be treated as an honor code violation.

Students who arrive more than 10 minutes after a lecture has started, or leave before the lecture has ended, will be counted as being absent for that class. **Use of computers and cell phones is NOT permitted in class, except when taking polls.** Students who are disruptive, who are using cell phones or computers, or doing homework or other tasks will be recorded as being absent for that class. An exception will be made for students who want to take notes on computer during class – this will only be allowed if the student declares in advance that they intend to take notes, sit in the back few rows of the class, and email their notes after each class to the instructor.

For online classes, do not come to class but participate online by zoom. The poll will also be on zoom. If you drop off of zoom, such as if your internet fails, please make an effort to get back on quickly. You can check your attendance record at any time under Attendance on Canvas.

To make up for an absence, please view the recorded lecture in its entirety, read the required reading for that week, and write a 1-page essay as described below. **The essay can be used for one of your essays required in the semester** (please indicate in your essay that this is your intention). Students must submit the essay within three weeks of the absence (or by April 29, if at the end of the semester).

Essays. Students registered for **475** are asked to write **three** essays during the class. Students registered for **775** are asked to write **five** essays.

Essays should focus on the topic of a single class. Students should review the reading(s) provided for that class period and are required to reference at least one of those readings within their essay (how you reference the reading is not important). Essays must be typed, single-spaced and at least **one full page** with 12 point type and one-inch margins.

Essays may include a summary of the lecture and reading, but should not be only a summary. Please also provide your thoughts about what was presented, such as reactions to something said, the implications of a finding for policy, what is necessary to resolve problems, how you might help address the problems presented through your future profession, etc. Please do not write a very general essay on the problem of climate change, rather focus on the topic of one class; the Take-Home Final Exam will be your opportunity to express your thoughts more generally.

To avoid having all the essays turned in at the end of the semester, and to encourage a range of topics in the essays, essays should be turned in by these deadlines. For students enrolled in **475**, please turn in your essays on Canvas by 5 PM on these dates (writing about the topic of any lecture before that date): **March 6, April 10, and April 29.**

For students enrolled in **775**, please turn in your essays on Canvas by 5 PM on these dates (writing about the topic from any lecture before that date): **February 27, March 27, April 3, April 17, and April 29.**

Take-Home Final Exam. The Take-Home Final Exam is a personal reflection. Please write on what climate change means to you, such as how your personal attitudes on climate change might have changed as a result of the perspectives given in this class. You could focus on climate change science, impacts, energy, policy, or any other aspect of climate change that we discussed in class. The Personal Reflection can take any form that you'd like – use the space to focus on what you think is most important, considering factors such as the importance of climate change for human society and the world around us. The Personal Reflection must be typed, single-spaced and at least **two full pages** with 12 point type and one-inch margins. The Take-Home Final Exam must be turned in electronically by 5 PM on Monday, **May 1.**

Course Grading Scale(s)

Undergraduate students (475) will receive a grade of PASS if they satisfy the attendance requirement and receive a passing grade on three Essays and the Take-Home Final Exam.

Graduate students (775) must satisfy the attendance requirement, and will otherwise be graded (H, P, L, or F) on this weighting:

Essays	75%
Take-home final exam	25%

The Essays and Take-home Final Exam will be graded on the extent to which the Essays addresses the topic of the lecture, are well organized and clearly written, and express a thoughtful and forward-looking perspective on the issue.

Final course grades will be determined using the following [UNC Graduate School grading scale](#).

- **H**—High Pass (90-100): Clear excellence
- **P**—Pass (80-89): Entirely satisfactory graduate work
- **L**—Low Pass (70-79): Inadequate graduate work
- **F**—Fail (0-69)

Expectations, Policies, and Resources

Accessibility at UNC Chapel Hill

The University of North Carolina at Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in barriers to fully accessing University courses, programs and activities. Accommodations are determined through the Office of Accessibility Resources and Service (ARS) for individuals with documented qualifying disabilities in accordance with applicable state and federal laws. See the [ARS Website](#) for contact information or email ars@unc.edu.

Community Standards in Our Course and Mask Use.

UNC-Chapel Hill is committed to the well-being of our community – not just physically, but emotionally. The indoor mask requirement was lifted for most of campus on March 7, 2022. If you feel more comfortable wearing a mask, you are free to do so. There are many reasons why a person may decide to continue to wear a mask, and we respect that choice. For additional information, see [Carolina Together](#).

Counseling and Psychological Services at UNC Chapel Hill

CAPS is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate services, whether for short or long-term needs. Go to the [CAPS website](#), call them at 919-966-3658, or visit their facilities on the third floor of the Campus Health Services building for a walk-in evaluation to learn more.

Honor Code

You are not permitted to upload any content from this course to the web in any form, including but not limited to Chegg, Course Hero, Coursera, Google Drive, etc. If you post my course content, you may be violating my intellectual property rights. If you post your own work from

this course, you are allowing sites to profit from your intellectual property. In utilizing web sources to upload or download course content, you risk violating the University's Honor Code.

If you have any questions about your rights and responsibilities, consult the [Office of Student Conduct](#) or review the following resources: [Honor System](#); [Honor System module](#); [UNC Library's plagiarism tutorial](#); [UNC Writing Center's handout on plagiarism](#).

I expect all students to follow the guidelines of the UNC Honor Code. In particular, students are expected to refrain from "lying, cheating, or stealing" in the academic context. You can read more about the honor code at studentconduct.unc.edu.

Inclusive Excellence

We are committed to expanding diversity and inclusiveness across the School — among faculty, staff, students, on advisory groups, and in our curricula, leadership, policies and practices. We measure diversity and inclusion not only in numbers, but also by the extent to which students, alumni, faculty, and staff members perceive the School's environment as welcoming, valuing all individuals, and supporting their development.

For more information about how we are practicing inclusive excellence at the Gillings School, visit the following webpages: [Inclusive Excellence](#), [Inclusive Excellence Action Plan](#), [Minority Health Conference](#), and [National Health Equity Research Webcast](#).

Additional campus resources include: the [LGBTQ Center](#); [Non-Discrimination Policies at UNC Chapel Hill](#); [Ombuds](#); and [Prohibited Discrimination, Harassment, and Related Misconduct at UNC Chapel Hill](#).

Land Acknowledgement

Please read The Gillings School's [Land Acknowledgement](#).

Student Feedback and Equity Concerns

The Gillings School has in place a [mechanism for students to provide feedback](#), including specifically equity concerns and bias-related issues. You can use this form to describe feedback, both positive and negative, about anything including issues related to your experience as a student at Gillings, administrative processes, and classroom activities. This form will also allow you to specifically describe incidents in which racial or other equity-related bias, or microaggressions, occurred. You may submit this form anonymously. However, for us to follow up and provide the necessary support, we encourage you to include your contact information. For further information, please visit the [Student Feedback and Equity Concerns FAQ](#).

Please note that this form does not take the place of any University process or policy. If you would like to report an incident under the University's policy on [Prohibited Discrimination, Harassment, and Related Misconduct including Sexual and Gender Based Harassment, Sexual Violence, Interpersonal Violence, and Stalking](#), please visit [Safe At UNC](#) or the [Equal Opportunity and Compliance Office](#) (EOC) for additional information, including resources, contact, and reporting options.

Technical Support

If you have problems submitting an assignment or accessing readings in Canvas, immediately do the following:

1. Contact the UNC Information Technology Services (ITS) department with the time you attempted to do your course action and what the course action was.
2. Email your instructor with the information you sent to ITS and what time you sent the information.

The ITS department provides technical support 24-hours per day, seven days per week. If you need computer help, please contact the ITS Help Desk by phone at +1-919-962-HELP (4357), or by [online help request](#), or by [UNC Live Chat](#).

Title IX at UNC Chapel Hill

Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitations, or stalking is encouraged to seek resources on campus or in the community. Please contact the Director of Title IX Compliance / Title IX Coordinator ([Adrienne Allison](#)), [Report and Response Coordinators in the Equal Opportunity and Compliance Office](#), Counseling and Psychological Services (confidential), or the [Gender Violence Services Coordinators](#) (confidential) to discuss your specific needs. Additional resources are available at the ["Safe at UNC" website](#).

Schedule

Themes:	Science	Impacts	Energy	Communication	Policy
			Zoom class		

Date	Topic	Speaker
Jan. 10	Introduction to class and basics of the Earth's climate	Jason West, UNC Environ. Sciences & Engineering
Jan. 17	Learning from climate of the past	Hunter Hughes, UNC Earth Marine & Environ Sciences
Jan. 24	Observations of recent climate change	David Easterling, NOAA National Center for Environmental Information
Jan. 31	Projecting future climate change	Jason West, UNC Environ. Sciences & Engineering
Feb. 7	Climate change and human health	Jonathan Patz, U. of Wisconsin, Global Health Institute
Feb. 14	NO CLASS – Wellness Day	
Feb. 21	Insurance and coastal property in NC	Don Hornstein, UNC Law
Feb. 28	Global energy and the technological challenge of reducing global GHG emissions	Noah Kittner, UNC Environ. Sciences & Engineering
Mar. 7	Impacts of climate change on marine ecosystems	John Bruno, UNC Biology
Mar. 14	NO CLASS – Spring Break	
Mar. 21	Communicating climate change	Susan Joy Hassol, Climate Communication
Mar. 28	Finding global solutions	Jason West, UNC Environ. Sciences & Engineering
Apr. 4	Forging an international solution	Angel Hsu, UNC Public Policy
Apr. 11	Economics and the design of policies for climate change	Paige Weber, UNC Economics
Apr. 18	Climate change and environmental justice	Michael Mendez, Univ. of California Irvine, Urban Planning and Public Policy
Apr. 25	Ethical perspectives on climate change	Doug MacLean, UNC Philosophy