PUBHEHS 6325– Climate Change and Human Health
3 credits – Spring 2026
Online, Asynchronous

Course Instructor
Molly Mills, PhD, Environmental Science, The Ohio State University, 2022
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Instructor's Office Hours
Mondays noon-1 PM (In-person), or by appointment

Faculty Feedback & Response Time:
The following gives you an idea of my intended availability during the course:
- **Grading:** You can generally expect feedback within 7 days.
- **E-mail:** I will reply to e-mails within 24 hours on school days.
- **Discussion board:** Either the TA or the instructor will check and reply to messages in the discussion boards at least every 12 hours on school days, and every 24 hours on weekends, unless a different turnaround time (due to travel, etc.) is announced.

Graduate Teaching Assistant (GTA)
Noah Dameron, dameron.30@buckeyemail.osu.edu

GTA Responsibilities
The TA will assist with scoring assignments; however, final grades will be assigned by the professor. **Any questions regarding grading should be directed to the professor and not the TA.**

Course Description
Some people may be skeptical about global warming. However, there seems no doubt that the global climate has been changing. The environmental and climate change challenges the world is facing have never been greater or more complex. Recent US events and disasters indicate that domestic and global actions are needed even though we may face stronger political headwinds in the years ahead. Global climate change may have considerable direct and indirect impacts on human health. These impacts could include excessive heat-related illnesses, vector- and waterborne diseases, increased exposure to environmental toxicants, and exacerbation of cardiovascular and respiratory diseases due to declining air quality. This course will be based on scientific consensus, focusing on both natural phenomena and anthropogenic activities, with emphasis on associations between disease initiation and progression in humans. It will also serve as a platform for the students to participate in discussion and debate on these issues.

Prerequisites
For students matriculated in the graduate and professional degree programs, including admitted non-degree students

Course Learning Objectives
- Recognize the current controversial issues about climate change/global warming.

- Access and interpret the most current scientific information on climate change and its effect on human health.
- Summarize the current evidence about climate change and its effects on human health.
- Identify major health effects associated with climate change and understand the exposure pathways leading to these effects.
- Summarize the future scenarios about climate change and its implications for human health.
- Discuss and debate the impacts of climate change and its effect on human health.
- List possible prevention, mitigation, and adaptation strategies and further research needed to reduce the effects of climate and
  its effect on human health.

Text/Readings:
This course does not require a specific textbook. Assigned supplemental readings, such as journal articles, digital video clips or movies, and applicable website contents/links, are required in most of the modules.

Carmen
There is a Carmen site for this course: https://carmen.osu.edu. All course materials are available via Carmen.

You will need to use BuckeyePass (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:
- Register multiple devices in case something happens to your primary device. Visit the BuckeyePass - Adding a Device help article for step-by-step instructions (https://admin.resources.osu.edu/buckeyepass/adding-a-device)
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the Duo Mobile application (https://admin.resources.osu.edu/buckeyepass/installing-the-duo-mobile-application) to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357(HELP) and IT support staff will work out a solution with you.

Class Format: How this course works
- **Mode of delivery:** This course is 100% online delivery via asynchronous Distance Learning (DL) mode. There are no required sessions when you must be logged in to Carmen at a scheduled time.
- **Pace of online activities:** This course is designed with modules that are two weeks long (except modules 1 and 8), meaning there are bi-weekly due dates. It is strongly encouraged that you plan to complete the material in advance of the due dates. Modules open on Mondays and close Sundays, so materials in each module are due Sunday @ 11:59PM. Late policy exceptions will only be granted under exceptional circumstances and extended emergencies with properly documented evidence.
- **Credit hours and work expectations:** This is a **3-credit-hour course**. According to Ohio State policy (go.osu.edu/credithours), students should expect around 3 hours per week of time spent on direct instruction (e.g. readings, videos, lectures) in addition to 9 hours of homework/active learning activities (e.g., quizzes, homeworks, discussion boards) to receive a grade of (C) average.
- **Attendance and participation requirements:** Because this is an online course, your attendance is based on your online activity and participation. You are expected to log in to the course in Carmen **at least once** every week. During most weeks you will probably log in many times. If you have a situation that might cause you to miss an entire week of class, discuss it with the instructor as soon as possible

Course Technology

Technology skills needed for this course
- Basic computer and web-browsing skills
- Navigating Carmen (go.osu.edu/canvasstudent)
- CarmenZoom virtual meetings (go.osu.edu/zoom-meetings)

Required equipment
- **Computer:** current Mac (Mac OSX) or PC (Windows 10+) with high-speed internet connection
- **Calculator:** Students should have access to a scientific calculator that can perform basic arithmetic, square roots, logarithms, and exponentiation.
- **Other:** a mobile device (smartphone or tablet) to use for BuckeyePass authentication

Optional equipment (for participation in optional live office hours and/or review sessions)
- **Webcam:** built-in or external webcam, fully installed and tested
- **Microphone:** built-in laptop or tablet mic or external microphone

Required software
- **Microsoft 365 Copilot (formerly Office 365)**
  All Ohio State students are now eligible for free Microsoft 365 Copilot (formerly Office 365). Full instructions can be found at go.osu.edu/office365help.

Technology support
For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at and support for urgent issues is available 24/7.
- **Self-Service and Chat support:** http://it.osu.edu/help
- **Phone:** 614-688-4357(HELP)
- **Email:** servicedesk@osu.edu

Assignments/Assessments

Quizzes: 24%
To assess your level of understanding of the lecture topics and contents for each module, you will be required to complete quizzes. Quizzes may contain true/false, multiple choice, short answer, or other question forms. Quizzes are open-book and open notes.

Homeworks: 32%
This class will utilize homework assignments to foster critical thinking skills. Assignment instructions and submission requirements can be found in each assignment in Carmen. Students may use any materials in the course to answer the questions or complete the assignment, but all work must be their own.

Discussion Boards: 16%
Each module will include a required discussion board. The instructor will post questions or prompts related to the theme of the module. To receive maximum credit, you must post an initial response to the prompt and at least one response to your peers' posts. More detailed expectations for discussion posts and responses, as well as information on how students will be evaluated, is posted on the Carmen page.

Research Paper: 24%
Throughout the semester, students will be working on a large, graduate-level research paper. Students will select an anticipated future health effect associated with climate change. They will gather and analyze extensive scholarly articles and scientific literature to evaluate the certainty of this health outcome, based on their evidence. To help create a well-written, robust research paper, students will submit work in sections (called Milestones) throughout the semester. The milestones in the research paper include submission of their topic, an annotated bibliography and draft thesis statement, drafts of their introduction, body, and conclusion,

and finally the final draft of the research paper due at the end of the semester. Detailed instructions and rubrics for each assignment can be found on Carmen.

Short Essay: 4%
Students will answer a short essay question, reflecting on how the course affected their understanding of climate change.

Grading

ITEM	%	NOTES
Quizzes	24	Required for completion of the module
Homework	32	Required for completion of the module
Discussion Board	16	Required for completion of the module
Research Paper	24	Required for completion of the Course
Short essay	4	
TOTAL	100	

Grading Scale

A	93 to 100	Outstanding work that reflects mastery of the material and the ability to apply it
A-	90 to <93	Excellent work that reflects mastery of the material
B+	87 to <90	Good work that reflects mastery of most of the material
B	83 to <87	Good work that reflects mastery of some of the material
B-	80 to <83	Good work that reflects mastery of a few aspects of the material
C+	77 to <80	Mediocre work that reflects familiarity with, but not mastery of the material
C	73 to <77	Mediocre work that reflects familiarity with most of the material
C-	70 to <73	Mediocre work that reflects little familiarity with the material
D+	67 to <70	
D	60 to <67	
E	Below 60	

Class Policies
Late policy and make-ups: If you miss a deadline for any assignments, excused extensions or make-ups will only be permitted for legitimate reasons. Legitimate reasons include, but are not limited to, serious illness and injury, disability-related concerns, military service, death in the immediate family, or religious observance. If so, **you must contact the instructor before (preferable) or as soon as you are able**. You may be asked to provide evidence that you were unable to meet a deadline. Exceptions may be made at the instructor's discretion.

Prohibited Use of External Platforms
- Uploading course materials to platforms such as **Quizlet, Chegg, Course Hero, ChatGPT**, or similar websites is strictly prohibited and constitutes an academic violation.
- Sharing assignments, quizzes, or discussion content externally is considered **unauthorized distribution** and may lead to disciplinary consequences.

If you are unsure whether a particular tool or practice complies with course policies, please **ask your instructor before proceeding**.

Copyright Statement
This syllabus and all course materials (e.g., homework assignments, solution keys, course materials) are under copyright by the instructor and cannot be posted elsewhere without written permission.

Generative AI Policy
While generative artificial intelligence (GenAI) tools, such as Copilot or ChatGPT can be a valuable tool, academic integrity remains paramount. You are responsible for developing and articulating your own ideas. Attribute GenAI-generated content with proper citations and avoid plagiarism. If you use GenAI for any of the assignments, please include the following statement with each assignment:

- Application Used: Specify the GenAI application or tool you used (e.g., Copilot, ChatGPT, Claude AI, Gemini).
- Intended Purpose: Describe the purpose for which you used GenAI (e.g., idea generation, content creation).
- Quality of Initial GenAI Output: Evaluate the initial output generated by GenAI. For example, was it accurate, biased, coherent, and/or relevant?
- Iteration and Refinement: Explain how you revised prompts or adjusted parameters to refine the GenAI output. Did you experiment with different input prompts to improve the output?
- Incorporation in Completed Assignment: Reflect on how you incorporated the GenAI-generated content into your assignment. How did you edit, adapt, or combine it with other ideas?

While you are welcome to explore the use of GenAI tools in this class, with proper documentation, t**he use of GenAI tools in the writing of your research paper is not permitted.** The purpose of the research paper is to develop your own ideas, think critically, and write a well-supported paper. Writing is an important skill, which only improves with practice and by challenging yourself. In order to do that, you need to practice these skills independently. It is also crucial that you know where the information you use comes from and is cited properly. I am interested in hearing your voice in research paper. If you use GenAI tools to help find references, organize your thoughts, generate ideas, or create outlines in any of the Milestones, I expect full documentation of the AI use, as described above. The narrative writing of the paper must be completed on your own.

If I suspect that you have used GenAI inappropriately on an assignment, I will ask you to explain your process for completing the assignment in question. Submission of GenAI-generated content as your own original work is considered a violation of Ohio State's Academic Integrity (opens in new window) policy and Code of Student Conduct (opens in new window) because the work is not your own. The unauthorized use of GenAI tools will result in referral to the Committee on Academic Misconduct (opens in new window).

Office of Student Life: Disability Services
The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are ill and need to miss class, including if you are staying home and away from others while experiencing symptoms of a viral infection or fever, please let me know immediately. In cases where illness interacts with an underlying medical condition, please consult with Student Life Disability Services to request reasonable accommodations. You can connect with them at slds@osu.edu; 614-292-3307; or slds.osu.edu.

Mental Health Services

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

Religious Beliefs or Practices Accommodations

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement and the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the Civil Rights Compliance Office. (Policy: Religious Holidays, Holy Days and Observances)

Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-48.7 (B)). For additional information, see the Code of Student Conduct.

Intellectual Diversity
Ohio State is committed to fostering a culture of open inquiry and intellectual diversity within the classroom. This course will cover a range of information and may include discussions or debates about controversial issues, beliefs, or policies. Any such discussions and debates are intended to support understanding of the approved curriculum and relevant course objectives rather than promote any specific point of view. Students will be assessed on principles applicable to the field of study and the content covered in the course. Preparing students for citizenship includes helping them develop critical thinking skills that will allow them to reach their own conclusions regarding complex or controversial matters.

Grievances and Solving Problems
A student who encounters a problem related to his/her educational program has a variety of avenues available to seek resolution. According to University Policies, if you have a problem with this class, you should seek to resolve the grievance concerning a grade or academic practice by speaking first with the instructor or professor. Then, if necessary, you may take your case to the department chairperson. Specific procedures are outlined in Faculty Rule 3335-8-23, the CPH Graduate Student Handbook, and the CPH Undergraduate Student Handbook. Grievances against graduate, research, and teaching assistants should be submitted first to the supervising instructor, then to the chairperson of the assistant's department.

Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct
The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Civil Rights Compliance Office:

Online reporting form at http://civilrights.osu.edu/,
Call 614-247-5838 or TTY 614-688-8605,
Or Email civilrights@osu.edu

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Civil Rights Compliance Office to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

Course Outline

Module Dates	Topics and Readings	Assignments due at the end of module (Sunday 11:59PM, except Module 8)
*Must be completed to unlock Module 1	**Welcome to the Course** Introduce yourself in the discussion board and watch the introductory videos about your instructor, your course, and the assignments	
1 January 12 - 18, 2026 (1 week)	**Introduction to Climate Change** Lecture Topics: • Defining Climate Change • Climate Change and Human Health Impacts (overview) Readings/Webpages: • THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES, A Scientific Assessment, U.S. Global Change Research Program, 2016 Read pages vi-xi; 1-38 ("About This Report", "Guide to the report", "Executive Summary", and Chapter 1) • Fifth National Climate Assessment: Chapter 15 (Human Health) (links to PDF) • **EPA's Climate Change Science webpage** (good background webpage- feel free to explore) Optional Viewings • NASA Climate Change (Discovery) • The Basics of Climate Science	Essentials of Environmental Science • Climate Science: What You Need to Know • Alan Alda: Why you should trust science even if you're a skeptic	Homework 1, Quiz 1, Discussion Board 1
2 January 19 - February 1, 2026 (2 weeks)	**Climate Change and Health Progress and Mitigation** Lecture Topics: • Current State of Climate Change Impacts on Human Health (IPCC and *Lancet* Countdown Reports) • Scientific Uncertainty • Introduction to Research Paper Assignment Readings: • Romanello et al., 2025. *The Lancet*. The 2025 report of the Lancet Countdown on health and climate change. https://doi.org/10.1016/S0140-6736(25)01919-1 • IPCC Climate Change 2022: Impacts, Adaptation, and Vulnerability - Link to the report website, please focus your reading on Chapter 7, as this will be used for your research paper (see the assignment instructions and introduction video on Carmen) - Link to IPCC WGII Full Report as PDF • Ripple et al., 2025. *BioScience*. https://doi.org/10.1093/biosci/biaf149 (Hint: these are great references for your research paper)	Homework 2, Quiz 2, Discussion Board 2 ***Submit your topic for the research paper by the end of this module**

Module Dates	Topics and Readings	Assignments due at the end of module (Sunday 11:59PM, except Module 8)
	Viewings: • IPCC Climate Change 2022 Summary of Impacts, Adaptation, Vulnerability Report Additional Reading Materials: • IPCC Climate Change 2021: The Physical Science Basis (Links to report homepage, which gives evidence of climate change) o WGI Summary for Policy Makers (abridged summary of the evidence from the report linked above)	
3 February 2 - 15, 2026 (2 weeks)	Extreme Heat and Weather Events Lecture Topics: • Extreme Heat • Flooding, droughts, and other extreme weather events Readings: • THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES, A Scientific Assessment, U.S. Global Change Research Program, 2016 Read pages 44-60 (Chapter 2) and 100-115 (Chapter 4) • Ebi et al., 2021. Extreme Weather and Climate Change: Population Health and Health System Implications. *Annual Review of Public Health*. https://doi.org/10.1146/annurev-publhealth-012420-105026 • Kristie et al., 2021. Hot weather and heat extremes: health risks. *The Lancet*. https://doi.org/10.1016/S0140-6736(21)01208-3 • Bell et al., 2024. Climate Change, Extreme Heat, and Health. *The New England Journal of Medicine*. https://doi.org/10.1056/NEJMra2210769 • Fifth National Climate Assessment: Chapter 4 (Water) (links to PDF) – Read pages 12-22 on Floods and Droughts	Homework 3, Quiz 3, Discussion Board 3
4 February 16 - March 1, 2026 (2 weeks)	Air Quality Lecture Topics: • Overview of Climate Change Impacts on Air Quality • Health Outcomes • Solutions, mitigation, and future directions Readings: • THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES, A Scientific Assessment, U.S. Global Change Research Program, 2016 Read pages 70-86 (Chapter 3) • Fifth National Climate Assessment: Chapter 14 (Air Quality) (links to PDF) • Smirnova et al., 2023. Climate Change, Air Quality, and Pulmonary Health Disparities. *Clinics in Chest Medicine*. https://doi.org/10.1016/j.ccm.2023.03.005	Homework 4, Quiz 4, Discussion Board 4 ***Annotated bibliography and thesis statement due at the end of this module**

Module Dates	Topics and Readings	Assignments due at the end of module (Sunday 11:59PM, except Module 8)
	• Orru et al., 2017. The Interplay of Climate Change and Air Pollution on Health. *Current Environmental Health Reports*. https://doi.org/10.1007/s40572-017-0168-6 • Eguiluz-Gracia et al., 2020. The need for clean air: The way air pollution and climate change affect allergic rhinitis and asthma. *Allergy*. https://doi.org/10.1111/all.14177	
5 March 2 - 15, 2026 (2 weeks)	<u>Water-related Illnesses</u> Lecture topics: • Overview of Climate Change Impacts on Water Quality • Waterborne illness • Harmful algal blooms Readings: • THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES, A Scientific Assessment, U.S. Global Change Research Program, 2016 Read pages 158-174 (Chapter 6) • Fifth National Climate Assessment: Chapter 4 (Water) (links to PDF) • Semenza et al., 2023. Waterborne Diseases That Are Sensitive to Climate Variability and Climate Change. *The New England Journal of Medicine*. https://doi.org/10.1056/NEJMra2300794 • Griffith & Gobler, 2020. Harmful algal blooms: A climate change co-stressor in marine and freshwater ecosystems. *Harmful Algae*. https://doi.org/10.1016/j.hal.2019.03.008	Homework 5, Quiz 5, Discussion Board 5 ***Introduction draft due at the end of this module**
March 16-20	SPRING BREAK	
6 March 23 - April 5, 2026 (2 weeks)	<u>Vector-borne diseases</u> Lecture topics: • Ticks • Mosquitoes • Emerging diseases Readings: • THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES, A Scientific Assessment, U.S. Global Change Research Program, 2016 Read pages 130-146 (Chapter 5) • Souza & Weaver, 2024. Effects of climate change and human activities on vector-borne diseases. *Nature Reviews Microbiology*. https://doi.org/10.1038/s41579-024-01026-0 • Eisen & Eisen, 2023. Changes in the geographic distribution of the blacklegged tick, *Ixodes scapularis*, in the United States. https://doi.org/10.1016/j.ttbdis.2023.102233 • Couper et al., 2020. Impact of prior and projected climate change on US Lyme disease incidence. https://doi.org/10.1111/gcb.15435	Homework 6, Quiz 6, Discussion Board 6 ***Body draft due at the end of this module**

Module Dates	Topics and Readings	Assignments due at the end of module (Sunday 11:59PM, except Module 8)
	• Lydberger et al., 2025. A Scoping Review of Mosquito Vector Range Shifts: Widespread Expansions and Evidence Gaps in Climate Attribution. *Global Change Biology*. https://doi.org/10.1111/gcb.70551 • Chala & Hamde, 2021. Emerging and Re-emerging Vector-Borne Infectious Diseases and the Challenges for Control: A Review. *Frontiers in Public Health*. https://doi.org/10.3389/fpubh.2021.715759	
7 April 6 - 19, 2026 (2 weeks)	Food Safety, Nutrition, and Distribution Lecture topics: • Foodborne illness • Impacts on Agriculture • Impacts on Food Distribution and Access Readings: • THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES, A Scientific Assessment, U.S. Global Change Research Program, 2016 Read pages 190-205 (Chapter 7) • Fifth National Climate Assessment: Chapter 11 (Agriculture, Food Systems, and Rural Communities) (links to PDF) • Lake & Barker, 2018. Climate Change, Foodborne Pathogens and Illness in Higher-Income Countries. *Current Environmental Health Reports*. https://doi.org/10.1007/s40572-018-0189-9 • Duchenne-Moutien & Neetoo, 2021. Climate Change and Emerging Food Safety Issues: A Review. *Journal of Food Protection*. https://doi.org/10.4315/JFP-21-141 • Myers et al., 2017. Climate Change and Global Food Systems: Potential Impacts on Food Security and Undernutrition. *Annual Review of Public Health*. https://doi.org/10.1146/annurev-publhealth-031816-044356 • Singh et al., 2023. Climate change impacts on plant pathogens, food security and paths forward. *Nature Reviews Microbiology*. https://doi.org/10.1038/s41579-023-00900-7	Homework 7, Quiz 7, Discussion Board 7 ***Conclusion draft due at the end of this module**
8 April 20 - 28, 2026 (1 week)	Mental Health Lecture Topics: • Overview of Climate Change impacts on Mental Health • Populations of Concern Readings: • THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES, A Scientific Assessment, U.S. Global Change Research Program, 2016 Read pages 218-231 (Chapter 8)	Homework 8, Quiz 8, Discussion Board 8 ***Short essay due**

Module Dates	Topics and Readings	Assignments due at the end of module (Sunday 11:59PM, except Module 8)
	• Clayton, 2021. Climate Change and Mental Health. *Current Environmental Health Reports*. https://doi.org/10.1007/s40572-020-00303-3 • Palinkas & Wong, 2020. Global climate change and mental health. *Current Opinion in Psychology*. https://doi.org/10.1016/j.copsyc.2019.06.023	
Finals	***Final paper due April 28 @ midnight**	