Planetary Health Report Card (Medicine):

University of Wisconsin School of Medicine and Public Health

2025-2026 Contributing Team:

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The University of Wisconsin–Madison occupies ancestral Ho-Chunk land, a place their nation has called Teejop (day-JOPE) since time immemorial.
In an 1832 treaty, the Ho-Chunk were forced to cede this territory.

Decades of ethnic cleansing followed when both the federal and state government repeatedly, but unsuccessfully, sought to forcibly remove the Ho-Chunk from Wisconsin.
This history of colonization informs our shared future of collaboration and innovation.
Today, UW–Madison respects the inherent sovereignty of the Ho-Chunk Nation, along with the eleven other First Nations of Wisconsin.

Summary of Findings

Overall Grade	**A**

Curriculum	**A**

Overall, University of Wisconsin–Madison School of Medicine and Public Health has strong planetary health content integrated across the core curriculum.

- **Recommendation:** To ensure a more comprehensive pedagogical framework, the curriculum should be optimized to incorporate Indigenous ontologies and traditional ecological knowledge (TEK) within the discourse of sustainability. Furthermore, the integration of bioregional climate indicators—specifically those pertinent to the Upper Midwest—would enhance the clinical relevance of the material. This includes evaluating the health implications of climatological volatility, such as the increasing frequency of high-magnitude precipitation events, wildfire-driven atmospheric particulate spikes, and the ecological disruption of sentinel species indigenous to Wisconsin. Such enhancements would facilitate a more situated understanding of climate-health dynamics, bridging global theory with local public health realities

Interdisciplinary Research	**A+**

UW-Madison is strong in the realm of interdisciplinary research. There are several programs, labs, and institutes within the university that focus on planetary health research, and programs exist to connect community members with research in order to directly address communities disproportionately affected by climate change and environmental injustice. While the university overall is strong, the School of Nursing is not as robust in its research on these issues. There is a lack of research fellowships, funding, and opportunities specific to nursing students.

- **Recommendations:** Expand funding opportunities for students/faculty interested and engaged in this research, develop fellowships/research positions within the School of Nursing focused on these topics, and expand the School of Nursing's involvement in national and international organizations supporting planetary health.

Community Outreach and Advocacy	**A**

UW- Madison partners with local organizations and offers continuing education on climate-health. Events and collaborations raise awareness, but patient education and student leadership roles are limited.

- **Recommendations**: Increase communication channels so that all students are regularly updated with planetary health topics, news, and offerings as opposed to voluntary newsletter subscriptions and occasional features in student publications, expand UW Health's patient climate education, build public health outreach, and formalize student governance roles.

Support for Student-Led Initiatives	**A**

Campus-wide support is strong, including Green Fund grants, sustainability research hubs, and student organizations. However, most resources come from central programs, not from nursing or medical schools.

- **Recommendations**: Develop a centralized planetary health portal, offer research fellowships, appoint student liaisons, reestablish and refund the Planetary Health Graduate Scholarship Program, and integrate sustainability into QI projects.

Campus Sustainability	**C**

The Office of Sustainability leads efforts campus-wide, with initiatives like the Green Labs program and supporting state of Wisconsin and UW System sustainability goals and requirements by maintaining some LEED-certified buildings. However, gaps remain in renewable energy use, retrofitting existing buildings, composting access, event sustainability, sustainable procurement, and fossil fuel divestment.

- **Recommendations**: Strengthen carbon neutrality goals, expand composting and renewable energy use, adopt sustainability policies for events, enhance sustainable procurement guidelines, become a leader (in the UW System and the state of Wisconsin) in sustainability requirements for new and old buildings, and formalize a divestment strategy.

Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance describes planetary health as "a solutions-oriented, transdisciplinary field and social movement focused on analysing and addressing the impacts of human disruptions to Earth's natural systems on human health and all life on Earth." This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanisation, biodiversity shifts, natural disasters, climate change, changing land use and land cover, global pollution, and changing biogeochemical flows. The health of humanity is dependent on our environment, and our environment is changing rapidly and in disastrous ways. Although the World Health Organization has called climate change "the greatest threat to global health in the 21st century," many medical school's institutional priorities do not reflect the urgency of this danger to human health.

As future health professionals, we must be prepared to address the impacts of human-caused environmental changes on our patients' health. This preparation is in the hands of the institutions providing our medical training. It is imperative that we hold our institutions accountable for educating medical students about the health impacts of climate change and other anthropogenic environmental changes, generating research to better understand health impacts and solutions, supporting related student initiatives, embracing sustainable practices as much as possible, and engaging with surrounding communities that are most affected by environmental threats. Because climate change and environmental threats disproportionately affect vulnerable populations (for example, communities of colour, older adults sensitive to health threats, and individuals in low-resource settings), these issues are inherently ones of equity and justice.

With the purpose of increasing planetary health awareness and accountability among health professional schools, we have created a Planetary Health Report Card that students internationally can use to grade and compare their institutions on an annual basis. This student-driven initiative aims to compare health professional schools nationally and internationally on the basis of discrete metrics in five main category areas: 1) planetary health curriculum, 2) interdisciplinary research in health and environment, 3) university support for student planetary health initiatives, and 4) community outreach centred on environmental health impacts 5) medical school campus sustainability.

Definitions & Other Considerations

Definitions:

- **Planetary Health:** is described by the Planetary Health Alliance as "the health of human civilisation and the state of the natural systems on which it depends." For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional 'environmental health' examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of medical school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term "planetary health" to satisfy the metric.

- **Sustainable Healthcare:** As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.

- **Education for Sustainable Healthcare (ESH):** is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:

    1. Describe how the environment and human health interact at different levels.
    2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
    3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.

- **Medical School/Department vs. Institution:** When "Medical school" is specified in the report card, this only refers to curriculum and resources offered by the School/department of Medicine and does not include offerings from other parts of the university (e.g. undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when "institution" is specified in the report card, we are referring to the university more broadly including all of its campuses. Any resource reasonably accessible by medical students, no matter where in the institution the resource comes from or if it is

specifically targeted for medical students, can meet this metric.

- **Environmental history (Metric #19 in Curriculum Section):** This is a series of questions students are taught to ask during medical encounters that elicits patients' exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mould after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution. Please be as specific as possible when providing evidence for this metric.

- **Elective:** The word "elective" refers to an optional course or lecture series that a medical student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.

- **Core Curriculum:** This refers to taught material that is develiered to the entire cohort of students in one year.

- **Clerkship / Outreach:** This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.

- **Clinical rotation:** This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).

- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.

- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.

- **Climate justice:** The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.

- **Extractivisim:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to

the historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.

- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.

- **Low socioeconomic status (SES):** An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.

- **Low and Middle-Income Countries (LMIC):** Countries that have lower degrees of economic affluence.

- **Anthropogenic:** Created through human activity

- **Marginalized communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).

Other considerations:

- If there are more than one "tracks" at your institution with two different curricula (for example, Harvard Medical School has a Pathways and HST curriculum track), you can choose to fill out a report card for each track, or fill out just one report card and average the scores received by each track in cases where the scores are different (see the 2021 Harvard or Oxford report cards as examples). Where possible please indicate the proportion of students that are on each track.

Completed in 2022 a Literature Review by Metric is available for the 2022 medicine report card metrics. We are in the process of updating this review and making it more applicable to all the disciplines. However the review serves as a rough collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

Planetary Health Curriculum

Section Overview: ***This section evaluates the integration of relevant planetary health topics into the medical school curriculum.*** *Today's medical students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that medical students are trained to understand the health effects of these changes, as well as planetary health issues and principles more broadly. Topics like the changing geography of vector-borne diseases, the health consequences of air pollution, environmental health inequities, and disaster response principles must be part of every medical school's core curriculum.*

Curriculum: General

1.1. Did your medical school offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
Yes, the medical school has offered **more than one** elective whose primary focus is ESH/planetary health in the past year. (3 points)	
Yes, the medical school has offered **one** elective whose primary focus is ESH/planetary health in the past year. (2 points)	
The medical school does **not** have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a **lecture** on planetary health. (1 points)	
No, the medical school has **not** offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. (0 points)	
Score Assigned:	**3**

The institution offers a selection of courses that interrogate the intersection of healthcare delivery and ecological stability. By integrating perspectives spanning from environmental health and nutrition science, these courses equip future practitioners with the analytical frameworks necessary to navigate the complexities of global planetary health.

Elective Coursework:
Graduate Level
POP HLTH 785 - Sustainable Healthcare Systems

- Description: Focuses on designing and implementing sustainable healthcare systems that minimize environmental impact while improving health outcomes.
- Relevance: Addresses planetary health by integrating sustainability into healthcare delivery, resource management, and policy.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 720 - Planetary Health: Theory and Practice

- Description: Advanced course on the theory and practice of planetary health, emphasizing the interdependence of human health and natural systems.
- Relevance: Explores sustainable healthcare solutions within the broader context of planetary health, including climate change and biodiversity loss.
- Website: www.envir.wisc.edu/courses

NUTR SCI 620 - Sustainable Food Systems and Health

- Description: Analyzes the role of sustainable food systems in promoting health and mitigating environmental impacts.

- Relevance: Connects sustainable agriculture and food systems to planetary health and healthcare sustainability.
- Website: www.nutrisci.wisc.edu/courses

Research/Doctoral Level
POP HLTH 955 - Advanced Topics in Sustainable Healthcare
- Description: Seminar-style course for doctoral students, focusing on research methods and innovations in sustainable healthcare systems.
- Relevance: Encourages research on reducing the environmental impact of healthcare while improving health equity and outcomes.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 955 - Planetary Health Research Seminar
- Description: Advanced seminar for doctoral students to present and discuss research on planetary health, including sustainable healthcare solutions.
- Relevance: Supports research on the intersection of human health, environmental sustainability, and healthcare systems.
- Website: www.envir.wisc.edu/courses

NUTR SCI 955 - Sustainable Food Systems and Global Health
- Description: Doctoral-level course focusing on research to build sustainable food systems that support global health and planetary well-being.
- Relevance: Addresses the role of sustainable food systems in achieving planetary health and reducing the environmental burden of healthcare.
- Website: www.nutrisci.wisc.edu/courses

Curriculum: Health Effects of Climate Change

1.2. Does your medical school curriculum address the relationship between extreme heat, health risks, and climate change?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	**3**
Beyond addressing the respiratory and cardiovascular sequelae of rising temperatures, “Climate Justice in Action” examines the renal and gastrointestinal complications associated with extreme heat, such as nephrolithiasis and increased bacterial transmission. These themes are complemented by a targeted exploration of heat-related kidney injury in the “Climate Change and Kidney Disease” video module while case-based learning (CBL) sessions catalyze discussions of clinical reasoning and systemic environmental stress.	

Core Curriculum Learning Objectives:

Patients, Professionalism, and Public Health - Climate Justice In Action (2 lecture slides)

- Describe the impacts of climate change on health and health equity

Body in Balance - Impact of Global Climate Change on Cardiovascular Disease (video)

- Describe the relationship between climate change and the production of particulate matter, ground-level ozone formation and extreme temperature changes.
- Explain the impact of particulate matter, ground-level ozone and extreme temperatures on cardiovascular disease.

Climate Change and Kidney Disease (video)

- Discuss the impact of extreme weather on dialysis-dependent patients
- Identify examples of heat related kidney diseases

Body in Balance - Chronic Kidney Disease CBL

- Discuss the role of social and structural determinants in CKD, including climate change, race, and socioeconomic status.

CPC Block - Week 7 CBL

- Recognize the impact of climate change and heat on kidney disease and other medical conditions and demonstrate appropriate counseling on treatment and prevention of complications

Elective Coursework:

Graduate Level

POP HLTH 780 - Climate Change and Human Health

- Description: Advanced course on the health impacts of climate change, including extreme heat, vector-borne diseases, and mental health.
- Relevance: Directly addresses the health risks of extreme heat, such as heat exhaustion and heat-related mortality, and strategies for adaptation and mitigation.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 502 - Environmental Health and Risk Assessment

- Description: Focuses on assessing environmental health risks, including those related to extreme heat and climate change.
- Relevance: Provides tools to evaluate health risks from extreme heat events and their disproportionate impacts on vulnerable populations.
- Website: www.envir.wisc.edu/courses

GEOG 820 - Climate Change and Society

- Description: Explores the social and health impacts of climate change, including extreme heat events and their consequences for communities.
- Relevance: Examines how extreme heat exacerbates health disparities and the role of policy in addressing these challenges.
- Website: www.geography.wisc.edu/courses

Research/Doctoral Level

POP HLTH 950 - Advanced Topics in Climate and Health

- Description: Seminar-style course for doctoral students, focusing on research methods and emerging issues in climate change and health.
- Relevance: Encourages research on the health effects of extreme heat, including vulnerability assessments and intervention strategies.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 950 - Environmental Health Research Seminar

- Description: Advanced seminar for doctoral students to present and discuss research on environmental health, including extreme heat and climate change.
- Relevance: Supports research on the intersection of extreme heat, health risks, and climate change, with a focus on policy and community resilience.
- Website: www.envir.wisc.edu/courses

GEOG 950 - Climate Change Impacts and Adaptation
- Description: Doctoral-level course focusing on research to understand and mitigate the impacts of climate change, including extreme heat.
- Relevance: Addresses the health risks of extreme heat and the development of adaptation strategies to protect vulnerable populations.
- Website: www.geography.wisc.edu/courses

1.3. Does your medical school curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	**3**

Beyond addressing the respiratory and cardiovascular sequelae of rising temperatures, “Climate Justice in Action” examines the renal and gastrointestinal complications associated with extreme heat, such as nephrolithiasis and increased bacterial transmission. These themes are complemented by a targeted exploration of heat-related kidney injury within the “Climate Change and Kidney Disease” video module. CBL sessions empower students to analyze the complex interplay between environmental instability and the manifestation of systemic illness.

Core Curriculum Learning Objectives:

Patients, Professionalism, and Public Health - Climate Justice In Action (2 lecture slides)
- Describe the impacts of climate change on health and health equity

Body in Balance - Impact of Global Climate Change on Cardiovascular Disease (video)
- Describe the relationship between climate change and the production of particulate matter, ground-level ozone formation and extreme temperature changes.
- Explain the impact of particulate matter, ground-level ozone and extreme temperatures on cardiovascular disease.

Climate Change and Kidney Disease (video)
- Discuss the impact of extreme weather on dialysis-dependent patients

Body in Balance - Chronic Kidney Disease CBL
- Discuss the role of social and structural determinants in CKD, including climate change, race, and socioeconomic status.

CPC Block - Week 7 CBL

- Recognize the impact of climate change and heat on kidney disease and other medical conditions and demonstrate appropriate counseling on treatment and prevention of complications

Elective Coursework:
Graduate Level
POP HLTH 780 - Climate Change and Human Health
- Description: Advanced course on the health impacts of climate change, including extreme weather events, vector-borne diseases, and mental health.
- Relevance: Directly addresses the health risks of extreme weather events, such as flooding and hurricanes, and their impact on healthcare systems, including infrastructure and resource allocation.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 502 - Environmental Health and Risk Assessment
- Description: Focuses on assessing environmental health risks, including those related to extreme weather events and climate change.
- Relevance: Provides tools to evaluate health risks from extreme weather events and their disproportionate impacts on healthcare systems and vulnerable populations.
- Website: www.envir.wisc.edu/courses

GEOG 820 - Climate Change and Society
- Description: Explores the social and health impacts of climate change, including extreme weather events and their consequences for communities.
- Relevance: Examines how extreme weather events exacerbate health disparities and strain healthcare systems, with a focus on policy and adaptation strategies.
- Website: www.geography.wisc.edu/courses

Research/Doctoral Level
POP HLTH 950 - Advanced Topics in Climate and Health
- Description: Seminar-style course for doctoral students, focusing on research methods and emerging issues in climate change and health.
- Relevance: Encourages research on the health effects of extreme weather events, including vulnerability assessments and the resilience of healthcare systems.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 950 - Environmental Health Research Seminar
- Description: Advanced seminar for doctoral students to present and discuss research on environmental health, including extreme weather events and climate change.
- Relevance: Supports research on the intersection of extreme weather events, health risks, and healthcare system resilience, with a focus on policy and intervention.
- Website: www.envir.wisc.edu/courses

GEOG 950 - Climate Change Impacts and Adaptation
- Description: Doctoral-level course focusing on research to understand and mitigate the impacts of climate change, including extreme weather events.
- Relevance: Addresses the health risks of extreme weather events and the development of adaptation strategies to protect vulnerable populations and strengthen healthcare systems.
- Website: www.geography.wisc.edu/courses

1.4. Does your medical school curriculum address the impact of climate change on the changing patterns of infectious diseases?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	**3**

Several curriculum lectures synthesize the relationship between climatic volatility and infectious disease, delineating the mechanisms by which extreme precipitation and thermal stress catalyze hydrologic contamination and the proliferation of vector-borne pathogens. This didactic foundation is operationalized through CBL activities, where students integrate environmental determinants into the formulation of differential diagnoses. Furthermore, elective coursework facilitates a transdisciplinary inquiry into these phenomena through the lenses of population health, environmental science, and microbiology.

Core Curriculum Learning Objectives:

Patients, Professionalism, and Public Health - Climate Justice In Action (1 lecture slide)

- Describe the impacts of climate change on health and health equity

Invaders and Defense - Tick Bourne Diseases

- List the infectious agents transmitted by ticks in Wisconsin and other regions of the US.

Invaders and Defense - Parasites of Global Importance

- Describe the burden of parasitic disease globally

Acute Care Block - Fever CBL

- Analyze how climate change influences the differential diagnosis of infectious diseases.

Elective Coursework:

Graduate Level

POP HLTH 780 - Climate Change and Human Health

- Description: Advanced course on the health impacts of climate change, including infectious diseases, vector-borne diseases, and mental health.
- Relevance: Directly addresses how climate change influences the spread of infectious diseases, such as Zika, dengue, and cholera, and the implications for public health systems.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 502 - Environmental Health and Risk Assessment

- Description: Focuses on assessing environmental health risks, including those related to climate change and infectious diseases.
- Relevance: Provides tools to evaluate how climate change alters the risk of infectious diseases and impacts vulnerable populations.
- Website: www.envir.wisc.edu/courses

MICROBIO 640 - Emerging Infectious Diseases

- Description: Examines the emergence and re-emergence of infectious diseases, including the role of environmental and climatic factors.
- Relevance: Explores how climate change drives the spread of infectious diseases, such as Lyme disease, West Nile virus, and waterborne pathogens.
- Website: www.microbiology.wisc.edu/courses

Research/Doctoral Level
POP HLTH 950 - Advanced Topics in Climate and Health

- Description: Seminar-style course for doctoral students, focusing on research methods and emerging issues in climate change and health.
- Relevance: Encourages research on the impacts of climate change on infectious disease patterns, including vector ecology, pathogen dynamics, and public health interventions.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 950 - Environmental Health Research Seminar

- Description: Advanced seminar for doctoral students to present and discuss research on environmental health, including climate change and infectious diseases.
- Relevance: Supports research on the intersection of climate change, infectious disease patterns, and public health responses.
- Website: www.envir.wisc.edu/courses

MICROBIO 950 - Advanced Topics in Infectious Disease Ecology

- Description: Doctoral-level course focusing on research to understand the ecological and environmental drivers of infectious diseases.
- Relevance: Addresses how climate change influences the ecology of infectious diseases, including shifts in vector habitats and pathogen transmission dynamics.
- Website: www.microbiology.wisc.edu/courses

1.5. Does your medical school curriculum address the respiratory health effects of climate change and air pollution?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	**3**

"Climate Justice in Action" delineates the exacerbation of respiratory morbidities and allergic disease precipitated by atmospheric stressors, including wildfires, ozone, and prolonged pollen seasons. Utilizing a problem-based (PACE) framework, students interrogate the epidemiological impact of air pollution on childhood asthma and the clinical utility of the Air Quality Index in pediatric management. Furthermore, CBL clinical vignettes evaluate the broader systemic influence of climate change on respiratory health while fostering frameworks for participatory clinical action.

Core Curriculum Learning Objectives:
Patients, Professionalism, and Public Health - Climate Justice In Action (2 lecture slides)

- Describe the impacts of climate change on health and health equity

Pediatric Asthma PACE Case

- Describe the impact of climate change on asthma.
- Discuss the role of air pollution as a major cause of death and disease globally.
- Discuss why pediatric populations are considered more vulnerable to environmental exposures.
- Identify indoor and outdoor asthma environmental triggers.
- Describe key components of the air quality index and how they impact respiratory health

Surgical and Procedural Care/ Obstetrics/ Pediatrics - Respiratory Distress CBL

- Recognize the impact of environmental hazards on respiratory disease and provide anticipatory counseling.
- Discuss environmental racism (e.g., air quality exposure) and its contribution to disparities in respiratory health.

Acute Care Block - Dyspnea CBL

- Analyze the effect of climate change on respiratory conditions.

Elective Coursework:

Graduate Level

ENVIR ST 502 - Environmental Health and Risk Assessment

- Description: Focuses on assessing environmental health risks, including those related to air pollution and climate change.
- Relevance: Provides tools to evaluate how climate change worsens air pollution and its health effects, particularly in vulnerable populations.
- Website: www.envir.wisc.edu/courses

ATM OCN 630 - Atmospheric Chemistry and Air Pollution

- Description: Examines the chemical processes in the atmosphere that lead to air pollution and their interactions with climate change.
- Relevance: Explores how climate change influences atmospheric chemistry, including the formation of pollutants like ozone and fine particulate matter.
- Website: www.aos.wisc.edu/courses

POP HLTH 780 - Climate Change and Human Health

- Description: Advanced course on the health impacts of climate change, including air pollution and respiratory diseases.
- Relevance: Directly addresses how climate change exacerbates air pollution and its implications for public health.
- Website: www.pophealth.wisc.edu/courses

Research/Doctoral Level

ENVIR ST 950 - Environmental Health Research Seminar

- Description: Advanced seminar for doctoral students to present and discuss research on environmental health, including air pollution and climate change.
- Relevance: Supports research on the intersection of climate change, air pollution, and health outcomes, with a focus on mitigation and adaptation strategies.
- Website: www.envir.wisc.edu/courses

ATM OCN 950 - Advanced Topics in Atmospheric Sciences

- Description: Doctoral-level course focusing on advanced research in atmospheric sciences, including air pollution and climate interactions.
- Relevance: Addresses how climate change influences air quality and the development of strategies to mitigate air pollution.
- Website: www.aos.wisc.edu/courses

POP HLTH 950 - Advanced Topics in Climate and Health

- Description: Seminar-style course for doctoral students, focusing on research methods and emerging issues in climate change and health.
- Relevance: Encourages research on the health impacts of air pollution exacerbated by climate change, including respiratory and cardiovascular diseases.
- Website: www.pophealth.wisc.edu/courses

1.6. Does your medical school curriculum address the cardiovascular health effects of climate change, including increased heat	
This topic was explored **in depth** by the **core** curriculum.(3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	**3**

"Climate Justice in Action" synthesizes the cardiovascular impacts of climate degradation while establishing a broad framework that outlines how physicians integrate the ecological model of health into clinical practice. The "Impact of Global Climate Change on Cardiovascular Disease ELO" pre lecture video elucidates the nexus between environmental degradation and systemic vascular impairment. It specifically examines the physiological sequelae of air pollution—including compromised endothelial integrity and heightened thrombotic risk—within the context of disproportionate vulnerability. This analysis extends to the compounding clinical complications arising from the increasing frequency of heat-stress events and wildfire-related particulate exposure.

Core Curriculum Learning Objectives
Patients, Professionalism, and Public Health - Climate Justice In Action (1 lecture slide)
- Describe the impacts of climate change on health and health equity
- Examine the disproportionate burden of climate change on the health of vulnerable communities
- Identify opportunities for physician advocacy related to climate justice across the social ecological model

Impact of Global Climate Change on Cardiovascular Disease ELO (video)
- Describe the relationship between climate change and the production of particulate matter, ground-level ozone formation and extreme temperature changes.
- Explain the impact of particulate matter, ground-level ozone and extreme temperatures on cardiovascular disease.

Elective Coursework work:
Graduate Level
POP HLTH 780 - Climate Change and Human Health
- Description: Advanced course on the health impacts of climate change, including extreme heat, cardiovascular diseases, and mental health.

- Relevance: Directly addresses the cardiovascular health risks of extreme heat, such as heat exhaustion, heatstroke, and increased mortality, and strategies for adaptation.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 502 - Environmental Health and Risk Assessment
- Description: Focuses on assessing environmental health risks, including those related to extreme heat and climate change.
- Relevance: Provides tools to evaluate cardiovascular health risks from extreme heat events and their disproportionate impacts on vulnerable populations.
- Website: www.envir.wisc.edu/courses

KINES 720 - Environmental and Occupational Physiology
- Description: Examines the physiological responses to environmental stressors, including heat, and their health impacts.
- Relevance: Explores how extreme heat affects cardiovascular function and the implications for occupational and public health.
- Website: www.kinesiology.wisc.edu/courses

Research/Doctoral Level
POP HLTH 950 - Advanced Topics in Climate and Health
- Description: Seminar-style course for doctoral students, focusing on research methods and emerging issues in climate change and health.
- Relevance: Encourages research on the cardiovascular health effects of extreme heat, including vulnerability assessments and intervention strategies.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 950 - Environmental Health Research Seminar
- Description: Advanced seminar for doctoral students to present and discuss research on environmental health, including extreme heat and climate change.
- Relevance: Supports research on the intersection of extreme heat, cardiovascular health risks, and climate change, with a focus on policy and community resilience.
- Website: www.envir.wisc.edu/courses

KINES 950 - Advanced Topics in Environmental Physiology
- Description: Doctoral-level course focusing on research to understand and mitigate the health impacts of environmental stressors, including extreme heat.
- Relevance: Addresses the cardiovascular health risks of extreme heat and the development of adaptation strategies to protect vulnerable populations.
- Website: www.kinesiology.wisc.edu/courses

1.7. Does your medical school curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?
This topic was explored **in depth** by the **core** curriculum. (3 points)
This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	**3**

The 'Climate Justice in Action' curriculum delineates the broad psychosocial sequelae of climatic instability, ranging from affective disorders and PTSD to the systemic trauma of forced displacement and civil strife. Central to this discourse is the disproportionate neuropsychiatric burden borne by structurally marginalized populations. These themes are augmented by specialized inquiries into the intersection of environmental stressors and Alzheimer's Disease and Related Dementias (ADRD), alongside a critical characterization of the moral injury inherent to professional climate advocacy.

Core Curriculum Learning Objectives:

Patients, Professionalism, and Public Health - Climate Justice In Action (1 lecture slide)

- Describe the impacts of climate change on health and health equity

Mind in Motion - Climate Change and Cognitive Health ELO (video)

- Define climate-sensitive exposures relevant to biological mechanisms underlying cognitive aging and dementia.
- Recall mechanisms that exacerbate climate-sensitive exposures and health disparities in the context of ADRD.
- Apply systems thinking to understand how climate change affects ADRD risk and burden at different scales of analysis (biomedical conditions, interpersonal and individual processes, social environment, and built environment).

Mind in Motion - Climate Change and Moral Injury ELO (video)

- Describe the moral injury impact of climate change on physicians.
- Identify opportunities to address and reduce climate change related physician moral injury

Elective Coursework:

Graduate Level

POP HLTH 780 - Climate Change and Human Health

- Description: Advanced course on the health impacts of climate change, including mental health and neuropsychological effects.
- Relevance: Directly addresses the mental health consequences of climate change, such as trauma from extreme weather events, eco-anxiety, and long-term psychological stress.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 502 - Environmental Health and Risk Assessment

- Description: Focuses on assessing environmental health risks, including those related to climate change and mental health.
- Relevance: Provides tools to evaluate the mental health risks of environmental degradation and climate change, particularly in vulnerable populations.
- Website: www.envir.wisc.edu/courses

PSYCH 710 - Advanced Topics in Clinical Psychology

- Description: Examines advanced topics in clinical psychology, including the psychological impacts of environmental stressors.
- Relevance: Explores how climate change and environmental degradation contribute to mental health disorders, such as PTSD, anxiety, and depression.
- Website: www.psychology.wisc.edu/courses

Research/Doctoral Level

POP HLTH 950 - Advanced Topics in Climate and Health

- Description: Seminar-style course for doctoral students, focusing on research methods and emerging issues in climate change and health.
- Relevance: Encourages research on the mental health and neuropsychological effects of climate change, including trauma, resilience, and intervention strategies.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 950 - Environmental Health Research Seminar

- Description: Advanced seminar for doctoral students to present and discuss research on environmental health, including climate change and mental health.
- Relevance: Supports research on the intersection of environmental degradation, mental health, and neuropsychological outcomes, with a focus on policy and community resilience.
- Website: www.envir.wisc.edu/courses

PSYCH 950 - Advanced Topics in Neuropsychology

- Description: Doctoral-level course focusing on research to understand the neuropsychological impacts of environmental stressors, including climate change.
- Relevance: Addresses how environmental degradation and climate change affect brain function, behavior, and mental health, with a focus on vulnerable populations.
- Website: www.psychology.wisc.edu/courses

1.8. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	**3**

The 'Planetary Health Approach' lecture provides a critical interrogation of the Anthropocene, situating human health within the context of the Great Acceleration and the legacies of the Green Revolution. The discourse focuses on the reciprocal feedback loops between climate change and industrialized agrosystems, ultimately advocating for the adoption of a 'planetary health diet' as a primary strategy for mitigating global food insecurity and ecological strain.

Core Curriculum Learning Objectives:
Food, Fasting, and Fitness - Planetary Approach to Health:Connecting Climate, Agriculture, and Nutrition

- Describe a "planetary health diet" and the benefits it may confer
- Identify the impact of the food system and food production on human induced greenhouse gas emissions
- Recognize the ways in which climate change may impact human nutrition
- Understand the bidirectional relationship between agriculture and climate change

Food, Fasting, and Fitness - Global Climate Change and Obesity ELO (video)

- Discuss the relationships between global climate change and obesity in human health
- List mitigation strategies that a physician may use to address concerns for obesity and climate change

Food, Fasting, and Fitness - Climate Change: Active Transportation and Fitness

- Recognize the potential for "active transportation" to provide significant benefits to individual and population health
- Discuss the importance of urban design in promoting safe and active transport and physical activity
- Identify opportunities for physicians to promote active transport

Elective Coursework:

Graduate Level

POP HLTH 780 - Climate Change and Human Health

- Description: Advanced course on the health impacts of climate change, including food and water security, ecosystem health, and individual health outcomes.
- Relevance: Directly addresses how climate change disrupts food and water systems, damages ecosystems, and impacts individual and population health.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 502 - Environmental Health and Risk Assessment

- Description: Focuses on assessing environmental health risks, including those related to food and water security, ecosystem health, and climate change.
- Relevance: Provides tools to evaluate the health risks of climate change on food and water systems, ecosystems, and vulnerable populations.
- Website: www.envir.wisc.edu/courses

FOOD SCI 620 - Food Security and Climate Change

- Description: Analyzes the impact of climate change on global food systems and its implications for health, nutrition, and policy.
- Relevance: Explores how climate change disrupts food security and ecosystem health, with cascading effects on individual and population health.
- Website: www.foodsci.wisc.edu/courses

Research/Doctoral Level

POP HLTH 950 - Advanced Topics in Climate and Health

- Description: Seminar-style course for doctoral students, focusing on research methods and emerging issues in climate change and health.
- Relevance: Encourages research on the relationships between climate change, food and water security, ecosystem health, and individual health outcomes.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 950 - Environmental Health Research Seminar

- Description: Advanced seminar for doctoral students to present and discuss research on environmental health, including food and water security, ecosystems, and climate change.
- Relevance: Supports research on the intersection of climate change, ecosystem health, and food and water security, with a focus on health outcomes and policy.
- Website: www.envir.wisc.edu/courses

FOOD SCI 950 - Advanced Food Systems and Climate Resilience

- Description: Doctoral-level course focusing on research to build climate-resilient food systems and mitigate health impacts.

- Relevance: Addresses the role of food systems in adapting to climate change, protecting ecosystem health, and ensuring food and water security for individual and population health.
- Website: www.foodsci.wisc.edu/courses

1.9. Does your medical school curriculum address the outsized impact of climate change on marginalised populations such as those with low SES, women, communities of colour, Indigenous communities, children, homeless populations, and older adults?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	**3**

The curriculum provides a multisystemic interrogation of the climate-health nexus, delineating how environmental racism and disparate atmospheric pollutant burdens precipitate profound inequities in respiratory and cardiovascular health. By leveraging the social-ecological model, the modules evaluate the compounding impact of climatic volatility on social determinants of health, with a particular focus on the augmented physiological vulnerabilities of pediatric and marginalized cohorts. They also emphasize the pivotal role of environmental public policy in shaping population-level outcomes.

Curriculum Learning Objectives

Patients, Professionalism, and Public Health - Climate Justice In Action

- Describe the impacts of climate change on health and health equity
- Examine the disproportionate burden of climate change on the health of vulnerable communities
- Identify opportunities for physician advocacy related to climate justice across the social ecological model

Patients, Professionalism, and Public Health - Environmental Health ELO (video)

- Discuss why certain populations are considered more vulnerable to environmental exposures.
- Recognize how environmental public policy can dramatically impact health at a population level.

Pediatric Asthma PACE Case

- Discuss why pediatric populations are considered more vulnerable to environmental exposures.

Body in Balance - The Impact of Global Climate Change on Cardiovascular Health ELO (video)

- Acknowledge that there are populations at increased vulnerability to climate change, using this to inform patient counseling on mitigating personalized risk associated with climate-related consequences.

Surgical Procedural Care/ Obstetrics/ Pediatrics - Respiratory Distress CBL

- Discuss environmental racism (e.g., air quality exposure) and its contribution to disparities in respiratory health.

Acute Care Block - DEI CBL

- Evaluate the impact of climate change on multiple social determinants of health.

Elective Coursework:

Graduate Level

POP HLTH 780 - Climate Change and Human Health

- Description: Advanced course on the health impacts of climate change, including its disproportionate effects on vulnerable populations.
- Relevance: Directly addresses how marginalized groups, such as low-SES communities, children, and older adults, are more vulnerable to climate-related health risks.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 502 - Environmental Health and Risk Assessment

- Description: Focuses on assessing environmental health risks, including those related to climate change and its disproportionate impacts on marginalized populations.
- Relevance: Provides tools to evaluate how climate change exacerbates health disparities among marginalized groups, such as communities of color and Indigenous populations.
- Website: www.envir.wisc.edu/courses

SOC WORK 720 - Social Work and Environmental Justice

- Description: Examines the intersection of social work and environmental justice, with a focus on marginalized populations.
- Relevance: Explores how climate change disproportionately affects vulnerable groups, such as women, children, and homeless populations, and the role of social work in addressing these disparities.
- Website: www.socwork.wisc.edu/courses

Research/Doctoral Level

POP HLTH 950 - Advanced Topics in Climate and Health

- Description: Seminar-style course for doctoral students, focusing on research methods and emerging issues in climate change and health.
- Relevance: Encourages research on the disproportionate impacts of climate change on marginalized populations, including low-SES groups, Indigenous communities, and older adults.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 950 - Environmental Health Research Seminar

- Description: Advanced seminar for doctoral students to present and discuss research on environmental health, including climate change and its impacts on marginalized populations.
- Relevance: Supports research on the intersection of climate change, health disparities, and environmental justice, with a focus on vulnerable groups.
- Website: www.envir.wisc.edu/courses

SOC WORK 950 - Advanced Topics in Social Work and Environmental Justice

- Description: Doctoral-level course focusing on research to understand and address the disproportionate impacts of climate change on marginalized populations.
- Relevance: Addresses how climate change exacerbates social and health inequities among marginalized groups, such as women, children, and communities of color, and the role of social work in promoting equity.
- Website: www.socwork.wisc.edu/courses

1.10. Does your medical school curriculum address the unequal regional health impacts of climate change globally?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	**3**

By interrogating the etiological links between atmospheric stressors—specifically particulate matter and ground-level ozone—and chronic disease, the modules delineate a clear nexus between environmental degradation and human morbidity. Central to this discourse is a critical appraisal of global health equity, supported by an analysis of the inverse correlation between national carbon emissions and the geographical distribution of climate-mediated health impacts. This framework formalizes a methodology for physicians to identify the disproportionate global disease burden and implement targeted risk-mitigation strategies for structurally marginalized populations.

Core Curriculum Learning Objectives

Patients, Professionalism, and Public Health - Climate Justice In Action (1 lecture slide)

- Describe the impacts of climate change on health and health equity
- Examine the disproportionate burden of climate change on the health of vulnerable communities

Body in Balance - The Impact of Global Climate Change and Cardiovascular Disease ELO (video)

- Explain the impact of particulate matter, ground-level ozone and extreme temperatures on cardiovascular disease.
- Acknowledge that there are populations at increased vulnerability to climate change, using this to inform patient counseling on mitigating personalized risk associated with climate-related consequences.

Human Family Tree - Climate Change and Cancer ELO (video)

- Understand the two main ways in which climate change affects cancer: 1) Increasing cancer risk 2) Decreasing access to cancer care

Elective Coursework:

Graduate Level

POP HLTH 780 - Climate Change and Human Health

- Description: Advanced course on the health impacts of climate change, including its unequal effects on different regions globally.
- Relevance: Directly addresses how climate change disproportionately impacts health in low-income countries and vulnerable regions.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 502 - Environmental Health and Risk Assessment

- Description: Focuses on assessing environmental health risks, including those related to climate change and its unequal regional impacts.
- Relevance: Provides tools to evaluate how climate change exacerbates health disparities in different regions, particularly in the Global South.
- Website: www.envir.wisc.edu/courses

GEOG 820 - Climate Change and Society

- Description: Explores the social and health impacts of climate change, with a focus on regional disparities and vulnerable populations.
- Relevance: Examines how climate change disproportionately affects health in regions with limited resources and adaptive capacity.
- Website: www.geography.wisc.edu/courses

Research/Doctoral Level

POP HLTH 950 - Advanced Topics in Climate and Health

- Description: Seminar-style course for doctoral students, focusing on research methods and emerging issues in climate change and health.
- Relevance: Encourages research on the unequal regional health impacts of climate change, including vulnerability assessments and intervention strategies.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 950 - Environmental Health Research Seminar

- Description: Advanced seminar for doctoral students to present and discuss research on environmental health, including climate change and its global health impacts.
- Relevance: Supports research on the intersection of climate change, regional health disparities, and policy, with a focus on vulnerable populations.
- Website: www.envir.wisc.edu/courses

GEOG 950 - Climate Change Impacts and Adaptation

- Description: Doctoral-level course focusing on research to understand and mitigate the impacts of climate change, including regional health disparities.
- Relevance: Addresses how climate change disproportionately affects health in different regions and the development of adaptation strategies to protect vulnerable populations.
- Website: www.geography.wisc.edu/courses

Curriculum: Environmental Health & the Effects of Anthropogenic Toxins on Human Health

1.11. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	**3**
“Global Climate Change and Cancer” synthesizes the intersection of climatic volatility and oncology by interrogating the environmental etiology of malignant progression alongside the systemic disruption of the oncological care continuum. By articulating the compounding burden of escalating carcinogenic risks and compromised healthcare infrastructure, the module establishes a robust framework for proactive clinical mitigation.	

Core Curriculum Learning Objectives:
Food, Fasting, and Fitness - Global Climate Change and Cancer ELO (video)

- Understand how climate change affects cancer across the cancer continuum
- Understand the two main ways in which climate change affects cancer: 1) Increasing cancer risk 2) Decreasing access to cancer care
- Identify ways that physicians can act to mitigate the impact of climate change on cancer care

Elective Coursework:
Graduate Level
POP HLTH 780 - Climate Change and Human Health

- Description: Advanced course on the health impacts of environmental changes, including exposure to industrial toxins.
- Relevance: Addresses how air pollution and pesticides impact reproductive health, including fertility, pregnancy complications, and fetal development.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 502 - Environmental Health and Risk Assessment

- Description: Focuses on assessing environmental health risks, including those related to industrial toxins and reproductive health.
- Relevance: Provides tools to evaluate the reproductive health risks of exposure to air pollution, pesticides, and other environmental toxins.
- Website: www.envir.wisc.edu/courses

OB GYN 720 - Reproductive and Developmental Toxicology

- Description: Examines the effects of environmental toxins on reproductive health and fetal development.
- Relevance: Explores how industrial pollutants, such as air pollution and pesticides, disrupt reproductive health and contribute to adverse pregnancy outcomes.
- Website: www.obgyn.wisc.edu/courses

Research/Doctoral Level
POP HLTH 950 - Advanced Topics in Climate and Health

- Description: Seminar-style course for doctoral students, focusing on research methods and emerging issues in environmental health.
- Relevance: Encourages research on the reproductive health effects of environmental toxins, including air pollution and pesticides, and their mechanisms of action.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 950 - Environmental Health Research Seminar

- Description: Advanced seminar for doctoral students to present and discuss research on environmental health, including reproductive health impacts of industrial toxins.
- Relevance: Supports research on the intersection of environmental toxins, reproductive health, and policy, with a focus on vulnerable populations.
- Website: www.envir.wisc.edu/courses

OB GYN 950 - Advanced Topics in Reproductive Toxicology

- Description: Doctoral-level course focusing on research to understand the effects of environmental toxins on reproductive health and fetal development.
- Relevance: Addresses how industrial pollutants, such as air pollution and pesticides, impact reproductive health and contribute to intergenerational health disparities.
- Website: www.obgyn.wisc.edu/courses

1.12. Does your medical school curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	**0**
There remains pedagogical omission of local environmental threats that surround the Madison community	

1.13. To what extent does your medical school emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1point)	
This topic was **not** covered. (0 points)	
Score Assigned:	**2**

The core didactic framework lacks formalized integration of Indigenous ecological knowledge; however, this oversight is partially mitigated through a panel discussion with experts working within the indigenous food sovereignty space, and supplementary elective offerings that explore the interdependence of human and environmental health

Elective Coursework:
Graduate Level
PUBLHLTH 2 — Integrative Public Health Practice
- Description: Integrates public health knowledge and practice to find solutions to complex public health issues, applying systems thinking and cultural humility.
- Relevance: Emphasizes culturally sensitive approaches to public health, incorporating Indigenous value systems into health solutions.
- Website: https://guide.wisc.edu/courses/publhlth/publhlth.pdf

Research/Doctoral Level
ED POL 1 — Indigenous Learning and Foodways
- Description: Seeks to live the principles of Indigenous learning through Indigenous foodways and experiential, place-based learning activities.
- Relevance: Provides doctoral students with a deep understanding of Indigenous knowledge systems, essential for developing holistic planetary health solutions.
- Website: https://guide.wisc.edu/courses/ed_pol/

1.14. Does your <u>medical school</u> curriculum address the outsized impact of anthropogenic environmental toxins on marginalised populations such as those with low SES, women, communities of colour, children, homeless populations, Indigenous populations, and older adults?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	**3**

By addressing the heightened environmental vulnerability of low-income populations and outdoor workers, the curriculum initiates a multisystemic interrogation of the climate-health nexus. This discourse delineates how environmental racism and disparate xenobiotic burdens—specifically atmospheric pollutants—precipitate profound inequities in respiratory and cardiovascular health. Utilizing the social-ecological model, the modules evaluate the compounding impact of climatic volatility on social determinants of health, with a particular focus on the augmented physiological susceptibility of pediatric and marginalized cohorts.

Curriculum Learning Objectives

Patients, Professionalism, and Public Health - Climate Justice In Action

- Describe the impacts of climate change on health and health equity
- Examine the disproportionate burden of climate change on the health of vulnerable communities
- Identify opportunities for physician advocacy related to climate justice across the social ecological model

Patients, Professionalism, and Public Health - Environmental Health ELO (video)

- Discuss why certain populations are considered more vulnerable to environmental exposures.
- Recognize how environmental public policy can dramatically impact health at a population level.

Pediatric Asthma PACE Case

- Discuss why pediatric populations are considered more vulnerable to environmental exposures.

Body in Balance - The Impact of Global Climate Change on Cardiovascular Health ELO (video)

- Acknowledge that there are populations at increased vulnerability to climate change, using this to inform patient counseling on mitigating personalized risk associated with climate-related consequences.

Surgical Procedural Care/ Obstetrics/ Pediatrics - Respiratory Distress CBL

- Discuss environmental racism (e.g., air quality exposure) and its contribution to disparities in respiratory health.

Acute Care Block - DEI CBL

- Evaluate the impact of climate change on multiple social determinants of health.

Elective Coursework work:
Graduate Level
POP HLTH 780 - Climate Change and Human Health

- Description: Advanced course on the health impacts of environmental changes, including exposure to anthropogenic toxins.
- Relevance: Directly addresses how marginalized groups, such as low-SES communities and women, are more vulnerable to health risks from environmental toxins like pesticides and air pollution.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 502 - Environmental Health and Risk Assessment

- Description: Focuses on assessing environmental health risks, including those related to anthropogenic toxins and their disproportionate impacts on marginalized populations.
- Relevance: Provides tools to evaluate how environmental toxins exacerbate health disparities among marginalized groups, such as communities of color and Indigenous populations.
- Website: www.envir.wisc.edu/courses

SOC WORK 720 - Social Work and Environmental Justice

- Description: Examines the intersection of social work and environmental justice, with a focus on marginalized populations.
- Relevance: Explores how environmental toxins disproportionately affect vulnerable groups, such as children, homeless populations, and older adults, and the role of social work in addressing these disparities.
- Website: www.socwork.wisc.edu/courses

Research/Doctoral Level
POP HLTH 950 - Advanced Topics in Climate and Health

- Description: Seminar-style course for doctoral students, focusing on research methods and emerging issues in environmental health.
- Relevance: Encourages research on the disproportionate impacts of anthropogenic toxins on marginalized populations, including low-SES groups, Indigenous communities, and older adults.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 950 - Environmental Health Research Seminar

- Description: Advanced seminar for doctoral students to present and discuss research on environmental health, including the impacts of anthropogenic toxins on marginalized populations.
- Relevance: Supports research on the intersection of environmental toxins, health disparities, and environmental justice, with a focus on vulnerable groups.
- Website: www.envir.wisc.edu/courses

SOC WORK 950 - Advanced Topics in Social Work and Environmental Justice

- Description: Doctoral-level course focusing on research to understand and address the disproportionate impacts of environmental toxins on marginalized populations.
- Relevance: Addresses how environmental toxins exacerbate social and health inequities among marginalized groups, such as women, children, and communities of color, and the role of social work in promoting equity.
- Website: www.socwork.wisc.edu/courses

1.15. Does your medical school curriculum address the environmental and health co-benefits of a plant-based diet?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	**3**

The "Planetary Approach to Health" lecture provides a critical interrogation of the agrosystem-climate nexus, elucidating the bidirectional feedback loops wherein intensive food production serves as both a primary driver of anthropogenic greenhouse gas emissions, and a sector profoundly vulnerable to climatic instability. By examining the pathophysiological consequences of climate-mediated disruptions to human nutrition—including altered crop nutrient density and supply chain volatility—the module establishes the planetary health diet as a vital intervention. This dietary framework is presented not merely as a nutritional guideline, but as a strategic ecological imperative designed to optimize human health while simultaneously restoring biospheric homeostasis and staying within planetary boundaries.

Core Curriculum Learning Objectives

Food, Fasting, and Fitness - Planetary Approach to Health: Connecting Climate, Agriculture, and Nutrition

- Describe a "planetary health diet" and the benefits it may confer
- Identify the impact of the food system and food production on human induced greenhouse gas emissions
- Recognize the ways in which climate change may impact human nutrition
- Understand the bidirectional relationship between agriculture and climate change

Elective Coursework:

Graduate Level

NUTR SCI 375 — Special Topics

- Description: Offers in-depth exploration of contemporary issues relevant to health and nutrition, with topics varying each semester.
- Relevance: Potentially includes discussions on the health and environmental benefits of plant-based diets.
- Website: https://guide.wisc.edu/courses/nutr_sci/nutr_sci.pdf

C&E SOC 1-4 — Specialized Topics in Community and Environmental Sociology

- Description: Provides in-depth investigation into sociological aspects of various community and environmental issues, including globalization, climate change, and social sustainability.
- Relevance: Explores the social dimensions of environmental health, providing a comprehensive understanding of factors influencing planetary health.
- Website: https://guide.wisc.edu/courses/c_e_soc/c_e_soc.pdf

Research/Doctoral Level

AGROECOL 900 — Advanced Topics in Agroecology

- Description: Advanced study of selected topics in agroecology, including sustainable agriculture practices and their environmental impacts.
- Relevance: Provides a deep understanding of sustainable agriculture, emphasizing the environmental benefits of plant-based diets.
- Website: https://guide.wisc.edu/courses/agroecol/agroecol.pdf

NUTR SCI 900 — Advanced Topics in Nutritional Sciences

- Description: In-depth exploration of advanced topics in nutritional sciences, with content varying each semester.
- Relevance: Potentially includes research on the health benefits of plant-based diets.
- Website: https://guide.wisc.edu/courses/nutr_sci/nutr_sci.pdf

1.16. Does your medical school curriculum address the carbon footprint of healthcare systems?

This topic was explored **in depth** by the **core** curriculum.	
This topic was **briefly** covered in the **core** curriculum.	
This topic was covered in **elective** coursework.	
This topic was **not** covered.	
Score Assigned:	**3**

The curriculum facilitates a critical interrogation of the healthcare sector's contribution to climatic volatility, elucidating the carbon-intensive nature of modern medical infrastructure. By dissecting the environmental and fiscal repercussions of procurement strategies—specifically the reliance on single-use medical devices—the curriculum defines a standardized framework for sustainable healthcare. It identifies high-impact waste prevention opportunities within clinical settings, ultimately operationalizing the physician's role as a primary driver of institutional sustainability. Students are empowered to promote resource-efficient care delivery during their clinical clerkships, as a core professional competency, and identify potential sustainability efforts.

Core Curriculum Learning Objectives

Mind and Motion- Healthcare Sustainability

- Describe how the healthcare system contributes to climate change.
- Define what is meant by sustainable healthcare.
- Explain the financial and environmental implications of single-use devices.
- Identify how physicians can promote sustainable healthcare.
- Identify waste prevention opportunities in clinical settings.

Surgical and Procedural Care - Assignment

- Reflect on surgical waste and identify opportunities to promote healthcare sustainability
-

Elective Coursework

Graduate Level

POP HLTH 785 - Sustainable Healthcare Systems

- Description: Focuses on designing and implementing sustainable healthcare systems that minimize environmental impact.

- Relevance: Directly addresses the carbon footprint of healthcare systems, including energy use, waste management, and sustainable practices.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 502 - Environmental Health and Risk Assessment
- Description: Focuses on assessing environmental health risks, including those related to healthcare systems and their environmental impact.
- Relevance: Provides tools to evaluate the carbon footprint of healthcare systems and strategies for reducing environmental impact.
- Website: www.envir.wisc.edu/courses

CBE 550 - Sustainable Systems Engineering
- Description: Examines sustainable engineering practices, including energy efficiency and waste reduction in healthcare systems.
- Relevance: Explores how engineering solutions can reduce the carbon footprint of healthcare infrastructure and operations.
- Website: www.engr.wisc.edu/courses

Research/Doctoral Level
POP HLTH 950 - Advanced Topics in Climate and Health
- Description: Seminar-style course for doctoral students, focusing on research methods and emerging issues in climate change and health.
- Relevance: Encourages research on the carbon footprint of healthcare systems, including strategies for reducing emissions and improving sustainability.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 950 - Environmental Health Research Seminar
- Description: Advanced seminar for doctoral students to present and discuss research on environmental health, including the environmental impact of healthcare systems.
- Relevance: Supports research on the intersection of healthcare systems, climate change, and sustainability, with a focus on reducing carbon emissions.
- Website: www.envir.wisc.edu/courses

CBE 950 - Advanced Topics in Sustainable Engineering
- Description: Doctoral-level course focusing on research to understand and mitigate the environmental impact of engineered systems, including healthcare.
- Relevance: Addresses the carbon footprint of healthcare systems and the development of sustainable engineering solutions.
- Website: www.engr.wisc.edu/courses

1.17. Does your medical school curriculum cover these components of sustainable clinical practice in the core curriculum? (points for each)	**Score**
The health **and** environmental **co-benefits** of **avoiding** over-medicalisation, over-investigation and/or over-treatment (2 points)	0
The environmental impact of **pharmaceuticals** and over-prescribing as a cause of climate health harm. Alternatively teaching on **deprescribing** where possible and its environmental and health co-benefits would fulfil this metric. (2 points) .	0

The health **and** environmental **co-benefits** of **non-pharmaceutical management** of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK. (1 point)	1
Environmental impact of **surgical** healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	1
The impact of **anaesthetic** gases on the healthcare carbon footprint and ways to reduce anaesthesia's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)	1
The impact of **inhalers** on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)	0
Waste production within healthcare **clinics** and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting) (1 point)	1

The "Healthcare Sustainability" lecture quantifies clinical waste streams within perioperative practice by leveraging data from UW Health surgical suites. The lecture further interrogates the atmospheric pharmacology of volatile anesthetics, specifically the carbon-equivalent potency of sevoflurane, to illustrate the environmental burden of anesthetic gases. While the discourse concludes by operationalizing waste-mitigation strategies for outpatient settings, there remains a notable pedagogical omission regarding the environmental impact of pressurized metered-dose inhalers (pMDIs) and the clinical utility of de-prescribing. Integrating non-pharmaceutical management paradigms would further align the module with comprehensive sustainable pharmacotherapy standards.

Core Curriculum Learning Objectives
Mind and Motion - Healthcare Sustainability

- Describe how the healthcare system contributes to climate change.
- Define what is meant by sustainable healthcare.
- Explain the financial and environmental implications of single-use devices.
- Identify how physicians can promote sustainable healthcare.
- Identify waste prevention opportunities in clinical settings.

Curriculum: Clinical Applications

1.18. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies to have conversations with patients about the health effects of climate change?
Yes, there are strategies introduced for having conversations with patients about climate change in the **core** curriculum. (2 points)
Yes, there are strategies introduced for having conversations with patients about climate change in **elective** coursework. (1 points)
No, there are **no** strategies introduced for having conversations with patients about climate change. (0 points)

Score Assigned:	**2**

1.19. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies for taking an environmental history or exposure history?	
Yes, the **core** curriculum includes strategies for taking an environmental history. (2 points)	
Only **elective** coursework includes strategies for taking an environmental history. (1 point)	
No, the curriculum does **not** include strategies for taking an environmental history. (0 points)	
Score Assigned:	**2**
Core Curriculum Learning Objectives: **Patients, Professionalism, and Public Health - Environmental Health ELO** (video) ● Describe the key components of taking environmental history.	

Curriculum: Administrative Support for Planetary Health

1.20. Is your <u>medical school</u> currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?	
Yes, the medical school is currently in the process of making **major** improvements to ESH/planetary health education. (4 points)	
Yes, the medical school is currently in the process of making **minor** improvements to ESH/planetary health education. (2 points)	
No, there are **no** improvements to planetary health education in progress. (0 points)	
Score Assigned:	**4**
Leveraging longitudinal student feedback and the institutional benchmarks established by the Planetary Health Report Card, curriculum leadership has formalized a robust expansion of environmental health integration. This evolution transcends traditional didactic methods by incorporating asynchronous preparatory modules and collaborative, case-based inquiries. These enhancements reflect a steadfast commitment to planetary health, ensuring that the pedagogical framework remains responsive to both emerging global health imperatives and student-driven advocacy.	

1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core curriculum?	
Planetary health/ESH topics are **well integrated** into the core medical school curriculum. (6 points)	
Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum. (4 points)	
Planetary health/ESH is not integrated and is primarily addressed in **(a) standalone lecture(s).** (2 points)	
There is **minimal/no** education for sustainable healthcare. (0 points)	
Score Assigned:	**6**
The Phase 1 and Phase 2 core curricula feature a comprehensive longitudinal integration of environmental health, encompassing six primary lectures supported by seven asynchronous pre-clerkship modules. This didactic foundation is further reinforced through six collaborative, case-based learning (CBL) sessions and a specialized PACE clinical case, ensuring a multimodal approach to climate-health education.	

1.22. Does your medical school employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?	
Yes, the **medical school** has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)	
No, the **medical school** does **not** have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)	
Score Assigned:	**1**
The advancement of planetary health and sustainability within the core curriculum is currently overseen by dedicated faculty leadership. These members provide strategic stewardship, ensuring the continuous pedagogical refinement and longitudinal integration of environmental health competencies across the medical didactic	

1.23. Does your health professional curriculum include teaching on civic engagement/advocacy to address the environmental and structural determinants of health?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	**2**

The curriculum interrogates the reciprocal interplay between civic engagement and community resilience, framing socio-political participation as a fundamental determinant of health within the climate crisis. While the core learning objectives establish a foundational literacy in these concepts, specialized elective offerings operationalize the physician's role through a deeper analysis of policy-driven planetary health interventions.

Core Curriculum Learning Objectives:

Patients, Professionalism, and Public Health - Climate Justice in Action

- Identify opportunities for physician advocacy related to climate justice across the social ecological model

Patients, Professionalism, and Public Health - Environmental Health ELO (video)

- Recognize how environmental public policy can dramatically impact health at a population level.

Elective Coursework:

Graduate Level

POP HLTH 780 - Climate Change and Human Health

- Description: Advanced course on the health impacts of climate change, including its disproportionate effects on vulnerable populations.
- Relevance: Directly addresses how marginalized groups, such as low-SES communities, children, and older adults, are more vulnerable to climate-related health risks.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 502 - Environmental Health and Risk Assessment

- Description: Focuses on assessing environmental health risks, including those related to climate change and its disproportionate impacts on marginalized populations.
- Relevance: Provides tools to evaluate how climate change exacerbates health disparities among marginalized groups, such as communities of color and Indigenous populations.
- Website: www.envir.wisc.edu/courses

SOC WORK 720 - Social Work and Environmental Justice

- Description: Examines the intersection of social work and environmental justice, with a focus on marginalized populations.
- Relevance: Explores how climate change disproportionately affects vulnerable groups, such as women, children, and homeless populations, and the role of social work in addressing these disparities.
- Website: www.socwork.wisc.edu/courses

Research/Doctoral Level

POP HLTH 950 - Advanced Topics in Climate and Health

- Description: Seminar-style course for doctoral students, focusing on research methods and emerging issues in climate change and health.
- Relevance: Encourages research on the disproportionate impacts of climate change on marginalized populations, including low-SES groups, Indigenous communities, and older adults.
- Website: www.pophealth.wisc.edu/courses

ENVIR ST 950 - Environmental Health Research Seminar

- Description: Advanced seminar for doctoral students to present and discuss research on environmental health, including climate change and its impacts on marginalized populations.
- Relevance: Supports research on the intersection of climate change, health disparities, and environmental justice, with a focus on vulnerable groups.
- Website: www.envir.wisc.edu/courses

SOC WORK 950 - Advanced Topics in Social Work and Environmental Justice

- Description: Doctoral-level course focusing on research to understand and address the disproportionate impacts of climate change on marginalized populations.
- Relevance: Addresses how climate change exacerbates social and health inequities among marginalized groups, such as women, children, and communities of color, and the role of social work in promoting equity.
- Website: www.socwork.wisc.edu/courses

Section Total (65 out of 72)	**90.28%**

Interdisciplinary Research

Section Overview:
This section evaluates the quality and quantity of interdisciplinary planetary health research at the broader institution. *Interactions between health and the environment are complex and multifactorial. While climate change has been extensively studied from an environmental science perspective, planetary health is an emerging field. As leading health institutions with talented researchers and research resources, institutions should fund research studying the health effects of climate change and anthropogenic environmental toxins. This obligation is particularly strong because the public and policymakers are more attentive to climate change when its implications for human health are emphasised.*

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your institution?	
Yes, there are faculty members at the **institution** who have a **primary** research focus in planetary health **or** sustainable healthcare/vetcare. (3 points)	
Yes, there are individual faculty members at the **institution** who are conducting research **related** to planetary health or healthcare sustainability OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points)	
There are sustainability researchers at the **institution**, but not specifically associated with healthcare/vetcare. (1 point)	
No, there are **no** planetary health and/or sustainability researchers at the **institution** at this time. (0 points)	
Score Assigned:	**3**

Planetary Health Research Program

- Supports faculty and graduate research at the intersection of environmental public health and climate change.
- Recent projects (2023–2024):
  - Restorative Ecology and Pollinator Indicators at UW- Madison's Badgervoltaics Pilot Project (renewable energy & habitat restoration).
  - Exploring Planetary Health in Teaching and Nursing Education in Colombia & Malawi.
- **Citation:** Climate Solutions for Health. (n.d.). *Planetary Health Research Program. Climate Solutions for Health.* https://www.climatesolutionsforhealth.org/planetary-health-program

Sustainability Research Hub

- Launched in early 2024 to promote interdisciplinary sustainability research and attract federal research grants.
- Aims to position UW- Madison as a leader in sustainability research.

- **Citation:** University of Wisconsin–Madison. (2024, January). *UW- Madison launches sustainability research hub. UW- Madison News.* https://news.wisc.edu/uw-madison-launches-sustainability-research-hub/

Health-First Climate Action Research Center

- Established in September 2024 with a $3.8 million NIH grant.
- Focuses on community-based, health-centered climate action and the energy transition.
- Engages citizen scientists and develops decision-making models for policymakers.
- **Citation:** Nelson Institute for Environmental Studies. (2024). *Where climate meets health: The new Health-First Climate Action Research Center at UW- Madison. Nelson Institute for Environmental Studies.* https://nelson.wisc.edu/where-climate-meets-health/

Center for Sustainability and the Global Environment (SAGE)

- Studies environmental systems, natural resources, and human activity interactions.
- Provides policy and technology solutions to enhance sustainability and global health.
- **Citation:** Nelson Institute for Environmental Studies. (n.d.). *Center for Sustainability and the Global Environment (SAGE). University of Wisconsin–Madison*. https://sage.nelson.wisc.edu/

2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your <u>institution</u>?	
There is **at least one** dedicated department or institute for interdisciplinary planetary health research. (3 points)	
There is **not currently** a department or institute for interdisciplinary planetary health research, but there are **plans** to open one in the next 3 years. (2 points)	
There is an **Occupational and Environmental Health department**, but no interdisciplinary department or institute for planetary health research. (1 points)	
There is **no** dedicated department or institute. (0 points)	
Score Assigned:	**3**

The University of Wisconsin-Madison has several departments, centers, and research labs that support interdisciplinary planetary health research across campus, including through the School of Nursing, Global Health Institute, and Nelson Institute for Environmental Studies.

UW- Madison School of Nursing

Nursing faculty are actively engaged in planetary health research that intersects with climate justice, environmental health, and vulnerable communities. Current and recent projects include:

- **Dr. Jeneile Luebke**: *Anishinaabe-Mishtadimoons Inawendiwin – Restoring and Awakening the Cultural and Ecological Context- in progress;*

https://nursing.wisc.edu/staff/luebke-jeneile/

- **Dr. Linda Oakley:** *Health Equity for a Marginalized Black Community: A Feasibility Study of Co-creating Communities of Care Through Partnerships with Community-Based Public Health Nurses* (Grant Announcement)- *completed June 2024;https://nursing.wisc.edu/linda-d-oakley-awarded-grant-to-study-health-equity-for-a-marginalized-black-community/*

- **Dr. Wan-Chin Kuo**:
    - *Environmental Determinants of Premature Aging in Transportation and Construction Workforce – in progress;* https://nursing.wisc.edu/staff/kuo-wan-chin/

    - *Cardiorespiratory Disparities in Truck Drivers: The Role of Behavior-Environmental Interactions- in progress;* https://nursing.wisc.edu/staff/kuo-wan-chin/

    - *Determinants of Premature Aging in the Transportation and Construction Workforce- in progress;* https://nursing.wisc.edu/staff/kuo-wan-chin/

- **Jessica LeClair & Tonya Roberts**: *Adaptation of a Survey Instrument Measuring Public Health Nursing's Capacity to Promote Planetary Health Equity – in progress;* https://nursing.wisc.edu/staff/leclair-jessica/

- Kelly Krainak: *West Virginia Coalfield Syndemics: Theory and Perspectives on Adolescent Well-being – in progress;* https://nursing.wisc.edu/staff/krainak-kelly/

- **Dr. Jonathan Patz, MD, MPH:** Serving as the Vilas Distinguished Achievement Professor and the John P. Holton Endowed Chair of Health and the Environment at the University of Wisconsin-Madison. Inaugural director of the Global Health Institute at UW- Madison. His research primarily focuses on the health effects of global climate change, urban air pollution, and the health co-benefits of policies aimed at mitigating climate change. https://pophealth.wisc.edu/staff/patz-jonathan/

Planetary Health Graduate Scholarship Program (Defunct as of 2024)
A collaboration between the Global Health Institute (GHI) and the Nelson Institute for Environmental Studies, this program supported graduate students conducting research on human impacts on planetary health. Key Researcher: **Jessica LeClair, BSN, MPH** – Clinical faculty and planetary health advocate.

- Scholar Profile https://ghi.wisc.edu/research/research-climate-land-use-change/planetary-scholars/
- Program Overview https://nursing.wisc.edu/new-uw-madison-planetary-health-scholars-program-creates-synergy-for-a-healthier-future

Climate Solutions for Health Lab – Planetary Health Research Program
Funded by GHI and the Nelson Institute, this lab supports faculty and graduate research focused on the intersections of environmental public health and climate change. Key

Researcher: **Dr. Tracey Holloway** – Professor in Energy Analysis and Policy, with expertise in air quality and climate-energy-health intersections.

- https://nelson.wisc.edu/sage/staff/holloway-tracey/
- https://www.climatesolutionsforhealth.org/planetary-health-program

Center for Sustainability and the Global Environment (SAGE)
This interdisciplinary center investigates environmental systems, natural resources, and the interactions between human activity and the natural world. Key Researcher: **Dr. Zuzana Burivalova** – Assistant Professor of Environmental Studies and Forest & Wildlife Ecology.

- https://sage.nelson.wisc.edu/faculty/
- https://sage.nelson.wisc.edu/

Center for Sustainability and the Global Environment (SAGE)
This interdisciplinary center investigates environmental systems, natural resources, and the interactions between human activity and the natural world. Key Researcher: **Dr. Zuzana Burivalova** – Assistant Professor of Environmental Studies and Forest & Wildlife Ecology.

- https://sage.nelson.wisc.edu/faculty/
- https://sage.nelson.wisc.edu/

2.3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your institution?

Yes, there is a process in which community members impacted by climate and environmental injustice have **decision-making power** in the climate + environmental research agenda. (3 points)

Yes, there is a process in which community members impacted by climate and environmental injustice **advise** the climate + environmental research agenda. (2 points)

No, but there are **current efforts** to establish a process for community members to advise or make decisions on the research agenda. (1 points)

There is **no** process, and **no** efforts to create such a process. (0 points)

Score Assigned:	**3**

At UWSMPH a formal framework exists to ensure that community members disproportionately affected by climate and environmental injustice hold substantive governance roles in shaping the research agenda.

Office of Environmental Justice and Engagement

- **Mission:** Advance environmental stewardship and social justice by coordinating activities and events that focus on environmental and racial justice, decolonizing relationships with Native communities, and diversifying the constituency for environmental issues and action.

- **Community Involvement:** Serves as a catalyst for new research and teaching that better serve diverse communities, ensuring their perspectives are integrated into the university's environmental research initiatives.
- **Website:** https://nelson.wisc.edu/office-of-environmental-justice/

Wisconsin Initiative on Climate Change Impacts (WICCI)

- **Mission:** A statewide collaboration of scientists and stakeholders formed as a partnership between UW- Madison's Nelson Institute for Environmental Studies and the Wisconsin Department of Natural Resources.
- **Community Involvement:** Evaluates climate change impacts on Wisconsin and fosters solutions by engaging with local communities, including those disproportionately affected by climate change, to inform research priorities and adaptation strategies.
- **Website:** https://wicci.wisc.edu/

Wisconsin Climate Connection

- **Mission:** Helps communities respond to climate change through research-based programs tailored to local needs, building on knowledge from the diverse audiences served.
- **Community Involvement:** The Division of Extension has a network of educators embedded in nearly every county and many Native Nations, facilitating direct community input into research and program development.
- **Website:** https://climate.extension.wisc.edu/

Health-First Climate Action Research Center

- **Mission:** Establishes a community-driven, health-equity approach to climate change mitigation and adaptation.
- **Community Involvement:** The Community Engagement Core (CEC) within the center ensures that community and academic partners share influence and benefit to achieve common goals, actively involving communities in setting research agendas and decision-making processes.
- **Website:** https://reporter.nih.gov/search/RdHFKwqNNEGEUd_ghUcouQ/project-details/10982299

2.4. Does your institution have a planetary health website that centralises ongoing and past research related to health and the environment?

There is an **easy-to-use, adequately comprehensive** website that **centralises** various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities. (3 points)

There is a website that **attempts to centralise** various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive. (2 points)

The **institution** has an **Office of Sustainability website** that includes **some** resources related to health and the environment. (1 point)

There is **no** website. (0 points)	
Score Assigned:	**3**

A centralized digital platform is available that aggregates institutional resources at the intersection of health and the environment. This hub provides streamlined access to upcoming events, profiles of planetary health leadership, and current funding opportunities.

Global Health Institute (GHI) – Planetary Health

- This section of the GHI website provides an overview of planetary health, emphasizing the connections between human health and the health of our planet. It discusses the challenges posed by environmental changes and highlights the institute's commitment to addressing these issues through research and education.
- **Website:** https://ghi.wisc.edu/planetary-health/

Climate Solutions for Health Lab – Planetary Health Research Program

- This program supports UW- Madison graduate students and faculty conducting research at the intersection of environmental public health and ecological or climatic change. The website details current and past projects, showcasing interdisciplinary efforts to address planetary health challenges.
- **Website:** https://www.climatesolutionsforhealth.org/planetary-health-program

Planetary Scholars – UW- Madison Global Health Institute

- This page highlights the Planetary Health Graduate Scholarship program, which brings together students and advisors from various disciplines to explore how human activities impact the planet. It features profiles of past scholars and their research projects, illustrating the university's interdisciplinary approach to planetary health.
- **Website:** https://ghi.wisc.edu/research/research-climate-land-use-change/planetary-scholars/

2.5. Has your <u>institution</u> recently hosted a conference or symposium on topics related to planetary health?
Yes, the **institution** has hosted at least one conference or symposium on topics related to planetary health in the past year. (4 points)
Yes, the **institution** has hosted at least one conference or symposium on topics related to sustainable healthcare/vetcare in the past year. (3 points)
Yes, the **institution** has hosted a conference on topics related to planetary health / sustainable healthcare/vetcare in the past three years. (2 points)
The **institution** has not hosted any conferences directly, but they have provided financial support for a local planetary health event. (1 point)

No, the **institution** has not hosted a conference on topics related to planetary health in the past three years. (0 points)

Score Assigned:	**4**

Within the past academic year, the institution has successfully convened scholarly symposia dedicated to advancing planetary health discourse and interdisciplinary research.

2024 Global Health Symposium: "Moving Global Health Forward"

- **Date:** April 10, 2024
- **Description:** Building upon previous themes, this symposium aimed to advance discussions in global health, featuring a panel moderated by GHI Director Jorge Osorio, a keynote speaker, and presentations of global health projects from across the campus.
- **Website:** https://ghi.wisc.edu/2024-global-health-symposium-is-april-10/

20th Annual Global Health Symposium: "Why Global Health Networks Matter"

- **Date:** April 8, 2025
- **Description:** This upcoming symposium will take place at the Discovery Building and feature a keynote speaker, as well as posters from across campus showcasing global health initiatives.
- **Website:** https://ghi.wisc.edu/20th-annual-global-health-symposium-why-global-health-networks-matter-on-april-8-2025/

Universities of Wisconsin Sustainability Summit

- **Date:** April 2024
- **Description:** Hosted by the University of Wisconsin–Stevens Point, this summit provided an opportunity to engage with perspectives from multiple disciplines, examining important questions related to sustainability.
- **Website:** https://www3.uwsp.edu/conted/Pages/Sustainability-Conference.aspx

2.6. Is your institution a member of a national or international planetary health or ESH/ESV organisation?
Yes, the institution is a member of a national or international planetary health **or** ESH/ESV organisation. (1 points)
No, the institution is **not** a member of such an organisation. (0 points)

Score Assigned:	**1**

Consortium of Universities for Global Health (CUGH)

- **Description:** CUGH is a global network of academic institutions and organizations dedicated to addressing global health challenges.
- **UW- Madison's Involvement:** The university is a member institution, contributing to collaborative efforts in global health education, research, and service.

- **Website:** https://www.cugh.org/

Alliance of Nurses for Healthy Environments (ANHE) – Nurses Climate Challenge

- **Description:** ANHE, in collaboration with Health Care Without Harm, launched the **Nurses Climate Challenge** to educate nursing students about the health impacts of climate change.
- **UW- Madison School of Nursing's Involvement:** The School of Nursing is officially listed as a **School of Nursing Commitment** participant, integrating climate and health content into its curriculum.
- **Website:** https://nursesclimatechallenge.envirn.org/school-of-nursing-commitment/

Planetary Health Report Card (PHRC)

- **Description:** The PHRC is a student-led initiative that evaluates health professional schools on their integration of planetary health topics.
- **UW- Madison's Involvement:** The university participates in PHRC assessments, with its School of Nursing receiving an evaluation on curriculum, research, community outreach, and sustainability efforts.
- **Website:** https://phreportcard.org/wp-content/uploads/2024/04/UW-Madison_Nursing_2023-24.pdf

Section Total (17 out of 17)	**100%**

Community Outreach and Advocacy

***Section Overview:* This section evaluates medical school engagement in community outreach and advocacy efforts associated with planetary health.** *Researching and teaching planetary health is necessary but not sufficient. It is critical that institutions also directly engage with communities most affected by environmental health harms. Although climate change is a problem largely created by those with power and resources, its impacts fall disproportionately on under-resourced populations and communities of colour. Institutions should partner with local communities affected by climate change and pollution to share information about environmental health threats, advocate together for change, and provide opportunities for students to be a part of this work.*

3.1. Does your institution partner with community organisations to promote planetary and health?	
Yes, the **institution** meaningfully partners with **multiple** community organisations to promote planetary and environmental health. (3 points)	
Yes, the **institution** meaningfully partners with **one** community organisation to promote planetary and environmental health. (2 points)	
The **institution** does not partner with community organisations, but has participating in community focused events relating to planetary health. (1 point)	
No, there is **no** such meaningful community partnership. (0 points)	
Score Assigned:	**3**
The Wisconsin Energy Institute partners with Wisconsin KidWind annually for a hands-on renewable energy competition engaging students across Wisconsin in STEM. Scientists from UW-Madison and the National Weather Service at the Wisconsin Weather Festival help the community get hands on and learn more about the state's climate.	

3.2. Does your institution offer community-facing courses or events regarding planetary health?
The **institution** offers community-facing courses or events at least once every year. (3 points)
The **institution** offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points)
The **institution** has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point)

The **institution/medical school** have not offered such community-facing courses or events. (0 points)

Score Assigned:	**3**

UW-Madison School of Nursing with the Interprofessional Continuing Education Partnership hosts an annual “Native Nations Nursing, Helpers, and Healers Summit”. Speakers and topics at the summit discuss planetary health, advocacy for water and land, and food sovereignty related to indigenous lands. Members of the community and healthcare professionals are encouraged to attend. There are also opportunities within the Wisconsin Energy Institute available to students and community members to learn more about climate justice and policy. The Wisconsin Energy Institute offers Sustainable Energy Seminars and are available for the public on their YouTube channel.

3.3. Does your institution have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?

Yes, all students **regularly** receive communication updates dedicated to planetary health and/or sustainable healthcare. (2 points)
Yes, planetary health and/or sustainable healthcare topics are regularly included in communication updates to **some courses**. (1 point)
Students **do not** receive communications about planetary health or sustainable healthcare. (0 points)

Score Assigned:	**1**

The Office of Sustainability regularly publishes news articles, features, and updates on various sustainability initiatives and research projects. Additionally, the Campus Sustainability Newsletter provides updates on campus sustainability efforts, events, and opportunities. The university's main news platform also features articles tagged with "Sustainability," highlighting ongoing projects and achievements in this area.

Office of Sustainability News and Events

The Office of Sustainability maintains a dedicated news section that covers a wide range of sustainability topics, including campus initiatives, research breakthroughs, and educational events. This platform ensures that the university community stays informed about the latest developments in planetary health and sustainable practices.

Link: https://sustainability.wisc.edu/news-and-events/

Campus Sustainability Newsletter

To keep the campus community engaged, the Office of Sustainability offers a newsletter that includes updates on sustainability news, upcoming events, and internship and job opportunities related to environmental health and sustainability. Interested individuals can sign up to receive these regular communications.

Link: https://sustainability.wisc.edu/newsletter/

UW- Madison News – Sustainability Tag

The university's main news platform features a "Sustainability" tag, aggregating articles that discuss various aspects of sustainability and planetary health. This includes coverage

of new initiatives, research findings, and profiles of community members contributing to sustainable practices.
Link: https://news.wisc.edu/tag/sustainability/
Through these channels, UW- Madison ensures that issues related to planetary health and sustainable healthcare are regularly communicated to students, faculty, staff, and the broader community.

3.4. Does the institution or main affiliated hospital trust engage in professional education activities targeting individuals post graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare remain up to date during their professional career?

Yes, the **institution** or **main affiliated hospital trust** offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health. (2 points)

Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate provider. (1 point)

There are **no** such accessible courses for post-graduate providers. (0 points)

Score Assigned:	**2**

UW- Madison offers a range of continuing education opportunities for healthcare professionals focused on planetary health and sustainable healthcare. The Global Health Institute hosts recorded webinars for post-graduate audiences, including sessions such as Energy Challenges and Creative Solutions for Global Health and Climate Change Impacts on Global Health, both of which explore the intersections of environmental change, energy, and population health. Additionally, the Interprofessional Continuing Education Partnership (a collaboration between the Schools of Nursing, Pharmacy, and Public Health) offers courses including Climate, A Public Health Crisis: Making Connections & Building Solutions Together and Neurology and Climate Change, which support licensed professionals in building climate literacy and applying sustainability principles in healthcare settings. These offerings demonstrate a strong institutional commitment to advancing post-graduate education in planetary health.

3.5. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about environmental health exposures?

Yes, the **medical school** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)

Some affiliated hospitals have accessible educational materials for patients. (1 point)

No affiliated medical centres have accessible educational materials for patients. (0 points)

Score Assigned:	**2**

UW-Madison and its affiliated healthcare system, UW Health, offer publicly accessible educational materials for patients on a range of environmental health topics. The Department of Family Medicine and Community Health provides a downloadable *Indoor Environmental Health* handout that addresses issues such as lead exposure, mold, and indoor air quality. Additional resources are available through the *Integrative Health Resources* webpage, which offers patient and clinician modules on eco-wellness, mindful climate action, and environmental health assessments. These materials support patient understanding of how environmental exposures influence health and promote informed, preventive care. UW Health also maintains a *Sustainability Initiatives* page that outlines system-wide efforts to reduce environmental impacts and foster a healthier community, which may further contribute to public awareness and patient education.

3.6. Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about the health impacts of climate change?

Yes, the **medical school** or **<u>all</u> affiliated hospitals** have accessible educational materials for patients. (2 points)

Some affiliated hospitals have accessible educational materials for patients. (1 point)

No affiliated hospitals have accessible educational materials for patients. (0 points)

Score Assigned:	**2**

UW- Madison and UW Health provide publicly accessible resources to educate patients on the health impacts of climate change. The *Mindful Climate Action (MCA) Program*, developed by an interdisciplinary team at UW- Madison, helps individuals understand the connection between sustainable behaviors and improved health outcomes. The program promotes practical strategies such as active transportation, healthy eating, and mindfulness as ways to address both personal well-being and climate change. Additionally, the *Medical Alert: Climate Change is Harming Our Health in Wisconsin* report serves as a patient-facing tool to explain climate-related health risks specific to the region, including heat stress, respiratory illness, vector-borne diseases, and mental health impacts. These materials are available online and support both patient education and clinical conversations on climate and health.

Section Total (13 out of 14)	**92.86%**

Support for Student-Led Planetary Health Initiatives

Section Overview: ***This section evaluates institutional support for student-led planetary health initiatives, such as funding, fellowships, programming, and student groups.*** *Planetary health is a young field and, as young people facing a future deeply shaped by climate change, students are often some of the first at an institution to engage with it. Institutions should provide support for students to engage in sustainability quality improvement (QI) initiatives, discover mentors in their area of interest, and receive funding for planetary health projects.*

4.1. Does your institution offer support for students interested in enacting a sustainability initiative/QI project?	
Yes, the **institution** *either* offers grants for students to enact sustainability initiatives/QI projects *or* sustainability QI projects are part of the core curriculum. (2 points)	
The **institution** encourages sustainability QI projects (to fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, **but** there is no student funding available and there is no requirement to participate. (1 point)	
No, **neither** the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects. (0 points)	
Score Assigned:	**2**

UW- Madison offers strong support for students pursuing sustainability initiatives and quality improvement (QI) projects related to planetary and environmental health. Through the *Green Fund*, students can apply for financial support to implement projects that reduce the university's environmental footprint. These have included solar energy installations, eco-friendly lab upgrades, and sustainable landscaping. Additional support is available through *SIRE (Sustainability Innovation and Research Engagement)*, which funds student-led research and implementation projects on healthcare sustainability, climate change, and resilience. In the curriculum, courses such as *NURSING/LAW 768: Health Justice Clinic* and *NURSING 761: Health Program Planning, Evaluation, and Quality Improvement* encourage students to design QI projects that address sustainability goals in clinical settings. UW Health's *Sustainability Initiatives* further promote student involvement in green healthcare projects, including reducing single-use plastics. Additionally, the *Planetary Health Graduate Research Program* offers mentorship and academic resources for students researching environmental health challenges.

4.2. Does your institution offer opportunities for students to do research related to planetary health and/or sustainable healthcare/vetcare?
The **institution** has a **specific** research program or fellowship for students interested in doing planetary health/sustainable healthcare/vetcare research. (2 points)

There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these **require student initiative** to seek these out and carry them out in their spare time. (1 point)
There are **no opportunities** for students to engage in planetary health/sustainable healthcare research. (0 points)

Score Assigned:	2

UW- Madison offers several structured opportunities for students to engage in research focused on planetary health and sustainable healthcare. The *Planetary Health Graduate Scholarship Program* supports graduate students conducting interdisciplinary research on the intersection of human and environmental health, providing mentorship and funding to promote collaboration across disciplines. The recently launched *Sustainability Research Hub* offers centralized resources to support student and faculty-led projects in environmental sustainability, including proposal development and interdisciplinary networking. For undergraduate students, the *Summer Research Opportunity Program (SROP)* provides research experience and mentorship to prepare them for graduate studies, including topics related to climate, health equity, and sustainability. These programs help students contribute meaningfully to current planetary health challenges through both independent and mentored research.

4.3. Does the <u>institution</u> have a webpage where students can find specific information related to planetary health and/or sustainable healthcare/vetcare activities and mentors within the institution? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.
The institution has a webpage with specific information related to planetary health or sustainable healthcare/vetcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. (2 points)
There is an institution webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the nursing school, but it lacks key information. (1 point)
There is **no institution** specific webpage for locating planetary health and/or sustainable healthcare projects or mentors. (0 points)

Score Assigned:	**2**

UW-Madison maintains several active webpages that provide students with access to planetary health research, ongoing initiatives, and potential faculty mentors. The *Nelson Institute for Environmental Studies* shares information on interdisciplinary environmental programs, student projects, and research focused on sustainability, health, and justice. The *Global Health Institute* features profiles of planetary health scholars, current research, and

student opportunities across multiple departments. The *Population Health Institute* supports student involvement in research and policy work related to public and environmental health. These websites offer clear contact information, research highlights, and pathways for students to get involved in faculty-mentored projects related to climate, health systems, and equity.

4.4. Does your <u>institution</u> have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?	
Yes, there is a student organisation **with faculty support** at my medical school dedicated to planetary health or sustainability in healthcare. (2 points)	
Yes, there is a student organisation at my institution dedicated to planetary health or sustainability in healthcare but it **lacks faculty support.** (1 point)	
No, there is **not** a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points)	
Score Assigned:	**2**
UW-Madison supports several student organizations focused on planetary health, sustainability, and health equity, many of which have faculty involvement. These include the *Global Health Interest Group*, *One Health Interest Group*, *Wisconsin MEDLIFE*, and *Medical Students for a Sustainable Future at UW- Madison*, which bring together students from nursing, medicine, and other disciplines to engage in advocacy, service, and education. These groups often partner with university initiatives and events to promote environmental health and sustainability on campus. A full list of active student organizations dedicated to sustainability and environmental justice is available on the sustainability office page https://sustainability.wisc.edu/student-organizations/.	

4.5. Is there a student liaison representing sustainability interests who serves on a <u>department or institutional</u> decision-making council to advocate for curriculum reform and/or sustainability best practices?	
Yes, there is a student representative that serves on a department or institutional decision-making council/committee. (1 points)	
No, there is no such student representative. (0 points)	
Score Assigned:	**0**
While there are student representatives serving on School of Nursing committees, such as Undergraduate Curriculum, Graduate Programs, and Wellness Advisory & Action. None of	

these positions are specifically focused on sustainability or planetary health. Students may have space to bring forward related concerns, but there is currently no designated student liaison advocating for environmental health or sustainability best practices within decision-making bodies. More information on student governance roles can be found on the school of nursing governance page https://students.nursing.wisc.edu/2024/09/30/2024-2025-student-representatives-on-son-governance-committees/.

4.6. In the past year, has the institution had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	**Score**
Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.	1
Panels, speaker series, or similar events related to planetary health that have students as an intended audience.	1
Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.	1
Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	1
Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	1
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1
Score Assigned:	**6**

UW-Madison offers a wide range of co-curricular programs that engage students in planetary health across academic, cultural, and community settings. Students have opportunities to get involved in sustainable food systems through groups like Medical Students for a Sustainable Future at UW-Madison and the UW Student Organic Farm, which centers organic agriculture and food justice. Events like EarthFest and the Sustainable Energy Seminar Series from the Wisconsin Energy Institute create space for learning and dialogue around climate and health. The Helios student group connects students to hands-on climate action projects, including renewable energy installations and campus sustainability efforts. Cultural and community-centered programs are also a priority, with groups like We Outside, a BIPOC-led outdoor recreation collective, working to reclaim natural spaces for marginalized students. Meanwhile, the Nelson Institute continues to host conservation and environmental justice-focused events throughout the

year. Together, these offerings reflect a strong culture of student engagement in planetary health through both learning and action.

Section Total (14 out of 15)	**93.33%**

Campus Sustainability

***Section Overview:* This section evaluates the support and engagement in sustainability initiatives by the institution.** *The healthcare industry is a major contributor to greenhouse gas emissions as well as pollution that harms local, regional, and global ecosystems. While healthcare is, by nature, a resource-intensive endeavour, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinising every aspect of how our systems operate, from where we source our energy, to how we build our infrastructure, to what companies we invest in. Our medical schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimising environmental impact.*

5.1. Does your institution have an Office of Sustainability?	
Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is **at least one designated staff member** for sustainability at the hospital. (3 points)	
There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but **no specific staff member** in charge of hospital sustainability. (2 points)	
There are **no salaried sustainability staff,** but there is a sustainability task force or committee. (1 point)	
There are **no** staff members **or** task force responsible for overseeing campus sustainability. (0 points)	
Score Assigned:	**3**

UW-Madison has an established Office of Sustainability with multiple full-time staff focused on campus-wide sustainability initiatives. In addition, UW Health has dedicated sustainability personnel, including a Sustainability Specialist (Tom Thompson), a physician medical director of sustainability, and a program director. Together, UW Health designates 2.2 FTE toward sustainability, which includes hospital operations.

Office of Sustainability: https://sustainability.wisc.edu/

Staff Directory: https://sustainability.wisc.edu/about/directory/#staff

Sustainable Anesthesiology: https://anesthesia.wisc.edu/sustainable-anesthesiology/

UW Health Sustainability: https://www.uwhealth.org/about-us/sustainability

KPI Report Card: https://bynder.uwhealth.org/m/fbbcea65c8ea9d1e/original/UW-Health-Sustainability-Program-KPI-Report-Card.pdf

5.2. How ambitious is your institution's plan to reduce its own carbon footprint?	
The institution has a **written and approved plan** to achieve carbon neutrality by **2030** (5 points)	
The institution has a **written and approved plan** to achieve carbon neutrality by **2040** (3 points)	
The institution has a stated goal of carbon neutrality by **2040** but has **not created a plan** to reach that goal or the **plan is inadequate** (1 point)	
The institution/medical school does **not** meet any of the requirements listed above (0 points)	
Score Assigned:	**0**
UW-Madison does not currently have a formal or approved plan to achieve carbon neutrality. While the Chancellor announced a long-term goal of net-zero emissions by 2048, no official roadmap or implementation plan has been released at this time. Emissions Goals: https://sustainability.wisc.edu/goals/achieve-net-zero-emissions/ Aide from Alex Frank, Project Portfolio Manager at Office of Sustainability for UW-Madison.	

5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?	
Yes, the institution buildings are **100%** powered by renewable energy. (3 points)	
Institution buildings source **>80%** of energy needs from off-site and/or on-site renewable energy. (2 points)	
Institution buildings source **>20%** of energy needs from off-site and/or on-site renewable energy. (1 point)	
Institution buildings source **<20%** of energy needs from off-site and/or on-site renewable energy. (0 points)	
Score Assigned:	**0**
As of 2024, renewable energy accounts for approximately 13.3% of total campus electricity use. These figures apply campus-wide and include facilities used by the Schools of Nursing and Medicine. The percentage of energy sourced from renewables remains below the 20% threshold. Renewable Energy Dashboard: https://sustainability.wisc.edu/sustainability-dashboard/operations/#renewable-energy Aid from Josh Arnold, Campus Energy Advisor and Alex Frank, Project Portfolio Manager at the Office of Sustainability for UW-Madison	

5.4. Are sustainable building practices utilised for new and old buildings on the institution's campus, with design and construction of new buildings and remodelling of old buildings conforming to a published sustainability rating system or building code/guideline?	
Yes, sustainable building practices are utilised for new buildings on the institution's campus and the **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)	
Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have **not been retrofitted.** (2 points)	
Sustainable building practices are **inadequately or incompletely** implemented for new buildings. (1 point)	
Sustainability is **not considered** in the construction of new buildings. (0 points)	
Score Assigned:	**2**

Signe Skott Cooper Hall, home to the School of Nursing, was designed with sustainability in mind and achieved LEED Silver certification. It includes features such as bottle filling stations, energy-efficient lighting, and recycling infrastructure. While some older buildings are being upgraded, widespread retrofitting remains limited. UW- Madison requires all new construction and major renovations to incorporate sustainability design standards.

Signe Skott Cooper Hall: https://nursing.wisc.edu/about/visit/

LEED Scorecard:
https://www.usgbc.org/projects/uw-madison-signe-skott-cooper-hall?view=scorecard

UW Sustainability Building Guidelines:
https://www.wisconsin.edu/capital-planning/sustainability/sustainable-building-guidelines/

State Design Requirements (PDF):
https://doa.wi.gov/DFDM_Documents/MasterSpecs/Sustainability/SustainabilityGuidelines.pdf

Aid from Travis Bloomberg, Campus Resource Coordinator and Alex Frank, Project Portfolio Manager in the UW Madison Office of Sustainability

5.5. Has the institution implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?
Yes, the institution has implemented strategies to encourage and provide **environmentally-friendly transportation options** such as safe active transport, public

transport, or carpooling and these options are well-utilised by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default. (2 points)
The institution has implemented **some** strategies to provide environmentally-friendly transportation options, but the options are **unsatisfactorily** accessible or advertised. (1 point)
The institution has **not** implemented strategies to encourage and provide environmentally-friendly transportation options. (0 points)

Score Assigned:	**2**

UW-Madison encourages low-impact commuting through bus, biking, and walking infrastructure. Students receive bus passes through tuition, and both the School of Nursing and Health Sciences Learning Center have bus stops nearby. Bike lanes, racks, and shared bikes are widely available across campus. Transportation Options: https://transportation.wisc.edu/commuter-solutions/

5.6. Does your institution have an organics recycling program (compost) and a conventional recycling program (aluminium/paper/plastic/glass)?
Yes, the institution has **both** compost **and** recycling programs accessible to students and faculty. (2 points)
The institution has **either** recycling **or** compost programs accessible to students and faculty, but not both. (1 point)
There is **no** compost or recycling program at the medical school. (0 points)

Score Assigned:	**1**

A recycling program is available across campus, including the Schools of Nursing and Medicine. Composting, however, is limited to dining halls and unions. While the Office of Sustainability has expressed interest in expanding compost services, no formal program exists yet for academic or administrative buildings.

Recycling: https://sustainability.wisc.edu/recycling/

Composting: https://sustainability.wisc.edu/composting/

Dining Sustainability: https://union.wisc.edu/dine/sustainability/

Aid from Travis Bloomberg, Campus Resource Coordinator in the UW Madison Office of Sustainability and Jim Long, Associate Director of Dining and Hospitality at Union South

5.7. Does the institution apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?	
Yes, the institution has a**dequate s**ustainability requirements for food and beverages, including meat-free days or no red-meat, and **is engaged** in efforts to increase food and beverage sustainability. (3 points)	
There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution **is engaged** in efforts to increase food and beverage sustainability. (2 points)	
There are sustainability guidelines for food and beverages, but they are **insufficient or optional.** The institution is **not** engaged in efforts to increase food and beverage sustainability. (1 point)	
There are **no** sustainability guidelines for food and beverages. (0 points)	
Score Assigned:	**2**

Food and beverage services for the School of Nursing and the School of Medicine and Public Health are primarily provided by Wisconsin Union's "Revive" café and vending services. Wisconsin Union has implemented several sustainability practices including prioritizing local sourcing, offering discounts for reusable containers, composting at select locations, and eliminating plastic straws. However, many of these efforts are voluntary rather than required. In vending machines, packaging waste remains a challenge. Beverage stations, fair-trade coffee, and water bottle refill stations help reduce environmental impact, and forecasting tools like FoodPro are used to limit food waste.

Dining Sustainability: https://www.housing.wisc.edu/about/sustainability/food

Aid from Jim Long, Associate Director of Dining and Hospitality at Union South, Josh Berg Associate Director of Support Services at the Wisconsin Union, and Timothy Hough, Retail Operations Assistant Director at the Wisconsin Union

5.8. Does the institution apply sustainability criteria when making decisions about supply procurement?
Yes, the institution has **adequate** sustainability requirements for supply procurement **and** is **engaged** in efforts to increase sustainability of procurement. (3 points)
There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **engaged** in efforts to increase sustainability of procurement. (2 points)
There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **not engaged** in efforts to increase sustainability of procurement. (1 point)
There are **no** sustainability guidelines for supply procurement. (0 points)

Score Assigned:	**2**

The CTEN/Simulation team at the School of Nursing demonstrates strong procurement sustainability practices. They reuse simulation supplies such as IV tubing, catheters, and packaging materials, and they incorporate waste-reduction guidelines into teaching plans. Many supplies are sourced through donations from hospitals and partners, repurposing expired items for training use (Aid from Rachel Stanek, CTEN/CSS Clinical Faculty). While CTEN outlines clear sustainability practices, there are currently no formal procurement guidelines at the institutional level, and the School of Medicine and Public Health's CTAC does not currently include sustainability requirements (Aid from Amy Stickford Becker, Director of Longitudinal Curriculum and Instruction, SMPH)

5.9. Are there sustainability requirements or guidelines for events hosted at the institution?

Every event hosted at the institution **must** abide by sustainability criteria. (2 points)

The institution **strongly recommends or incentivizes** sustainability measures, but they are **not required.** (1 point)

There are **no** sustainability guidelines for institution events. (0 points)

Score Assigned:	**0**

There are no required sustainability criteria for institutional events. However, the Green Events Certification Program is available to help groups host environmentally-conscious events. This is a voluntary program and not consistently adopted across campus activities. Green Events Certification: https://sustainability.wisc.edu/certifications/green-events/

Aid from Alex Frank, Project Portfolio Manager at the Office of Sustainability for UW-Madison

5.10. Does your institution have programs and initiatives to assist with making lab spaces more environmentally sustainable?

Yes, the institution has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable. (2 points)

There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)

There are **no** efforts at the institution to make lab spaces more sustainable. (0 points)

Score Assigned:	**2**

The CTEN/Simulation team at the School of Nursing actively integrates sustainable practices into lab-based teaching. This includes reusing and repackaging supplies, limiting single-use items, using motion-activated lighting, avoiding paper waste, and sourcing materials through donation. In contrast, the School of Medicine and Public Health's CTAC does not currently have lab sustainability practices in place. Campus-wide, the Green Labs Certification Program provides guidance to labs across disciplines, and the Green Fund has supported student-led projects to improve lab sustainability.

Green Labs: https://sustainability.wisc.edu/certifications/green-labs/
Green Fund: https://sustainability.wisc.edu/greenfund/

Aid from Rachel Stanek, CTEN/CSS Clinical Faculty. Aid from Amy Stickford Becker, Director of Longitudinal Curriculum and Instruction, SMPH

5.11. Does your institution's endowment portfolio investments include fossil-fuel companies?	
The institution is **entirely divested** from fossil fuels **and** has made a **commitment to reinvest divested funds** into renewable energy companies or renewable energy campus initiatives. (4 points)	
The institution is **entirely divested** from fossil fuels. (3 points)	
The institution has **partially divested** from fossil fuel companies **or** has made a **commitment to fully divest**, but **currently** still has fossil fuel investments. (2 points)	
The institution has **not divested** from fossil-fuel companies, but faculty and/or students are **conducting organised advocacy** for divestment. (1 point)	
Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to change that. (0 points)	
Score Assigned:	**1**
UW-Madison continues to invest in fossil fuel companies and has not made a formal commitment to divestment. However, both students and faculty have called for divestment through organized advocacy efforts. Divestment Advocacy: https://irisnrc.wisc.edu/2023/10/31/university-action-in-the-face-of-climate-change-the-case-of-uw-fossil-fuel-divestment/	

Section Total (15 out of 32)	**46.88%**

Grading

Section Overview
This section focuses on the grading of the report card. The institution received a grade for each of the individual sections as well as an overall institutional grade. Section point totals were tallied, divided by the total points available for the section, and converted to a percentage. The overall institutional grade is a weighted average of the section grades, with curriculum receiving a higher weight owing to its larger number of metrics. Letter grades for each section and the institution overall were then assigned according to the table below.

Letter Grade*	Percentage
A	80% - 100%
B	60% - 79%
C	40% - 59%
D	20% - 39%
F	0% - 19%

**Within each grade bracket, a score in the top 5% (_5 to_9%), receives a "+", and a score in the bottom 5% (_0-_4%) receives a "--". For example, a percentage score of 78% would be a B+.*

Planetary Health Grades for the University of Wisconsin School of Medicine
The following table presents the individual section grades and overall institutional grade for the University of Wisconsin School of Medicine on this medical-school-specific Planetary Health Report Card.

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	(65/72) x 100 = 90.28%	A
Interdisciplinary Research (17.5%)	(17/17) x 100 = 100%	A+
Community Outreach and Advocacy (17.5%)	(13/14) x 100 = 92.86%	A
Support for Student-led Planetary Health Initiatives (17.5%)	(14/15) x 100= 93.33%	A
Campus Sustainability (17.5%)	(15/32) x 100 = 46.88%	C
Institutional Grade	**(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 85.37%**	**A**

Report Card Trends

Section Overview
This graph demonstrates trends in overall and section grades for the years in which UWSMPH has participated in the Planetary Health Report Card initiative.