Planetary Health Report Card (Medicine) 2026:

University of Minnesota Medical School

2025-2026 Contributing Team:

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Land acknowledgment: The University of Minnesota-Twin Cities campus is built within the traditional homelands of the Dakota people. Minnesota comes from the Dakota name for this region, Mni Sota Makoce, which loosely translates to *the land where the waters reflect the skies.*

Summary of Findings

Overall Grade	A

Curriculum	A

- The UMN SERVE curriculum is committed to comprehensive planetary health and education across its curriculum, particularly within the preclinical years. Students receive in-depth exposure to the physical and mental health impacts of climate change, including robust coverage of extreme heat, air pollution, food security, and environmental justice. The curriculum has increased its focus on indigenous health and the disproportionate impacts of climate change on marginalized populations. Planetary health concepts are integrated throughout the preclinical curriculum; however, gaps exist in their application to clinical training. Additionally, the school lacks dedicated electives focused specifically on planetary health, limiting opportunities for students to explore these topics in greater depth.
- **Recommendations:** To increase the translation of climate-related health impacts into physician-patient interactions, we suggest expanding structured training in environmental history taking and patient-centered discussions of environmental health risks. Additionally, increasing elective offerings would provide students with more opportunities for in-depth study of planetary health and sustainable healthcare.

Interdisciplinary Research	A

- The University of Minnesota's interdisciplinary research on planetary health is robust. The UMN has several health programs that are a part of the Planetary Health Alliance and Global Consortium on Climate and Health Education. Several faculty members focus on planetary health and sustainability research, such as Jessica Hellmann and Hyun Kim. In addition, there is an institute devoted to collaborative sustainability research (IoE). The UMN prides itself on collaborative research in all disciplines and creating events that encourage this collaboration. These events include Code Blue for Patient Earth and the Annual Planetary Health Guest lecture event. To streamline this work, the UMN has a department and website specialized to sustainability. As a whole, the UMN demonstrates excellence with its comprehensive interdisciplinary research.
- **Recommendations**: The UMN SOD could organize a LnL related to planetary health and dentistry. The UMN SOD could also join the Planetary Health Alliance and the Global Consortium on Climate and Health Education. In addition, the various research labs at UMN SOD could join the Green Labs program which assesses the sustainability of research labs.

Community Outreach and Advocacy	A

- The University of Minnesota School of Nursing (UMN SON) earned a 87% score in Community Outreach and Advocacy for Planetary Health. This is accomplished with strong partnerships throughout the community that focus on communities with a disproportionate burden of climate change, education to the community through the SON and The Center for Planetary Health (The Center). The SON and The Center also have an international reach with their partnership with The Planetary Health Alliance, offering education, resources and networking internationally for all individuals.
- **Recommendations**: To continue to expand its reach and successes, UMN SON can provide education and information on climate advocacy in the local and national arena. Additionally, UMN SON can assist in the creation of accessible educational materials to be available in affiliated teaching hospitals for **patients about the health impacts of climate change and about environmental health exposures.** These two categories scored 1 point below the highest score and thus can be beneficial to improve.

Support for Student-Led Initiatives	A+

- The University of Minnesota provides exceptional support for student-led sustainability initiatives through project and research grants, student involvement in university-wide decision-making, and co-curricular student programs. These opportunities span from interprofessional gardens, student-led clubs outdoors, to grants worth up to $15,000 for sustainability projects.
- **Recommendations:** There is an opportunity for the university to create a centralized resource center that consolidates all sustainability-related events, organizations, and programs into an easily accessible manner. Additionally, greater undergraduate involvement in sustainability governance and decision-making could strengthen the university's commitment to planetary health.

Campus Sustainability	**C+**

- The UMN has committed to improving sustainability practices, and has invested money accordingly by retrofitting buildings to meet environmental standards, creating incentivization programs to promote energy conservation in research spaces, and hiring new sustainability-focused staff members to guide university policy, with the ultimate stated goal of becoming carbon neutral by 2050. Additionally, the UMN has continued to divest from fossil-fuel related interests.
- **Recommendations:** While it would be optimal to expedite the process of becoming carbon neutral, given that the University has chosen 2050 as its timeline, we suggest the following measures in the interim: continue to add staff members focused on increasing sustainability, emphasize local food procurement practices for dining halls and University-sponsored events (potentially by partnering with organizations like The Good Acre), and maintain transparency in energy usage by keeping public sources updated.

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 health professional 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 health professional training. It is imperative that we hold our institutions accountable for educating health professional 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) 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 health professional 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 (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 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 the taught material that is delivered 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).

Scoring Matrix

- Elective coursework (1 point): This score applies to material that is actively selected by the students such as a module choice, or additional lecture series. By implication, only a given proportion of the cohort will receive this taught material.
- Brief coverage in the core curriculum (2 points): This score applies where a topic is covered only briefly in a core curriculum session. This implies that the entire cohort receives the same material. At minimum brief inclusion would qualify as inclusion in a single lecture slide in a single year.
- In depth coverage in the core curriculum (3 points): This score applies where a topic is taught in significant detail or where a topic is repeatedly brought up in different years. This might look like several dedicated lecture slides, or inclusion of the same topic in different lectures and teaching formats.

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.

Updated in 2025, a complete literature review by metric is available for the 2024/25 Medicine Report Card Template. This largely translates across disciplines although we are hoping to expand this process across all of our covered disciplines. A link to the 2025 literature review by metric is available here.

Planetary Health Curriculum

Section Overview: ***This section evaluates the integration of relevant planetary health topics into the medical school curriculum.*** *Today's health professional students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that 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 point)	
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:	1
Score explanation: The school offers “INMD 7523 Occupational & Environmental Medicine,” an elective focused on clinical care for work-related conditions, corporate medical direction, and workplace safety, rather than sustainable healthcare or planetary health.	

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
Score explanation: In the initial phase of the SERVE curriculum, implemented in Fall 2023, second-year medical students are required to take the course "Social and Community Health IV."	

This course prominently features health and climate change as a major core theme. Students are asked to complete a case-based project in teams that's focused on presenting a clear planetary health-related question through a literature search and proposing a solution to the question.

Two learning objectives covered in "Social and Community Health IV" include:
Consider how Planetary Health impacts students' lives during medical training.
Examine how Planetary Health will influence future roles as residents and physicians.

There is also a lecture titled "Clinical Toxicology and Environmental Health" in the "Fundamentals of Medicine" course that explores the disproportionate impact of climate change as well as related harmful environmental exposures. The presenter includes exploration of race, occupation, location, and socioeconomic status, and other social determinants of health as they relate to an individual's exposure to extreme heat caused by climate change and the resulting health effects.

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
Score explanation: In the initial phase of the SERVE curriculum, there is a lecture titled "Clinical Toxicology and Environmental Health" within the "Fundamentals of Medicine" block, addressing the unequal effects of climate change and hazardous environmental exposures. For example, a slide from the presentation examines how different social determinants, including race, occupation, location, and socioeconomic status, influence an individual's vulnerability to extreme heat and its associated health consequences.	

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:	2
Score explanation: Through the core curriculum, one third of students explored the relationship between climate change and changing patterns of infectious disease with considerable depth. For the other two thirds, however, other opportunities to learn about the changing patterns of infectious	

disease were not explicitly covered elsewhere. In the "Social and Community Health IV" course, students completed a 3-session planetary health group project, consisting of a case study and evidence-review presentation. Of the 12 topics that students were assigned to, four related to the changing patterns of infectious diseases, including “Emerging Zoonoses,” “Pandemic Preparedness and Fever in a Returning Traveler,” “Vectorborne Disease,” and “Pets & Other Animal Sentinels.”

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
Score explanation: In the “Fundamentals of Medicine” course, the lecture "Clinical Toxicology and Environmental Health” indicated the growing trend of pollutants from wildfire smoke, asbestos, pesticides, and occupational dust exposure, and their potential to cause respiratory symptoms. In the “Respiratory” course, air pollution, wildfire smoke, longer pollen seasons, and mold from flooding, were taught as modifiers or risk factors for specific diseases, including: cystic fibrosis, asthma, nonallergic rhinitis, COPD, and lung cancer. These risk factors were mentioned across four lectures: “Bronchiectasis”, “Upper Airway Disease”, “Asthma and COPD”, and “Lung Cancer”. In the same course, “Problem Based Learning Session #1” contained a patient-case focusing on asthma, with one learning objective prompting students to consider how climate change exacerbates asthma over time. Air pollution’s negative impact on the respiratory tract was also referenced in the “Social and Community Health I” course lecture, “Urban Planning”.	

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
Score explanation: In the lecture “Environmental Exposure & Cardiovascular Disease” in the first year required “Cardiovascular Course” of the pre-clinical phase of the SERVE curriculum, learning objectives focused on exposure sources and mechanisms of cardiovascular pathology, as well as reviewing how air pollution, wildfire smoke, and excessive heat impact one’s cardiovascular health. The lecture discussed exposure sources including fossil fuels, combustion products, particulate matter, and heavy metals, with cardiovascular effects of heart failure, ischemic heart disease, hypertension, cardiac rhythm abnormalities, and atherosclerosis. A particular slide focused on the	

mechanisms of extreme heat cardiovascular disease, including increased strain, blood viscosity, cholesterol, inflammatory cytokines, poor sleep, and decreased physical activity. The lecture concluded with potential mitigation techniques.

Additionally, in the required "Social and Community Health IV" course for second year students, students completed a 3-session module on planetary health. One of the 12 cases assigned to small groups of students focused on extreme heat, which involved a case study of a patient with congestive heart failure, and reviewed the cardiovascular effects of heat-related illness.

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:	2
Score explanation: In the required "Social and Community Health IV" course for second year students in the pre-clinical phase of the SERVE curriculum, one of the 12 cases assigned to small groups of students focused on climate distress and ecoanxiety. Learning objectives of the case included understanding how various environmental-related emotions are experienced, and the potential accompanying clinical symptoms of this emotional distress. The case reviewed screening recommendations, diagnostic tools, treatment options, and intervention strategies. Not all small groups were assigned this case to review.	

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
Score explanation: In both the first and second year required SERVE curriculum, the relationship between these topics was discussed through the "Becoming a Doctor" course, with food insecurity, food apartheid, food justice, food sovereignty, and the environmental impacts of the current food system all being specifically addressed. An example of this can be found in the lecture titled "Food is Medicine for Human, Community and Planetary Health" includes the following learning objectives: 1. Describe food insecurity and recognize the relationship between food insecurity and health outcomes.	

2. Define a food system and its relationship to human, community and planetary health.

Additionally, a case-based learning session in "Clinical Skills I" titled "Discussing a Food/Nutrition History" addresses food security relating to validated screening questions, with examples of clinical situations in which this screening may be relevant as well as example phrasing for how this can be incorporated into a medical interview. The thread of food and water security has been continually woven throughout the didactic curriculum in the "Life Stages" thread as well, with an emphasis on whole foods, key nutrients and dietary patterns, and how various medical conditions are impacted by lack of access, for example in the "Renal" course lecture titled "Food Insecurity, Diet, Nutrition in Chronic Kidney Disease."

1.9. Does your <u>medical school</u> 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

Score explanation: Across the preclinical years of the SERVE curriculum, this topic is interwoven into several courses and various lectures. These impacts are discussed most heavily in the "Social and Community Health" courses, SCH I and II, in which there were specific lectures focusing on social determinants of health and challenges faced by marginalized groups as a result of structural barriers, including the outsized impact of climate change. Two examples from each course are "Introduction to Structural Competency-Housing, Gentrification, and Health" and "Indigenous Social Determinants of Health - Barriers to Equitable Healthcare," respectively. These detail environmental injustices resulting from settler colonialism and practices such as redlining and highway construction in historically marginalized neighborhoods, leading to higher temperature and pollutant exposure, as well as lack of access to high quality food or drinking water. Additionally, these concepts were incorporated into systems-based courses, with another example found in a "Fundamentals of Medicine" lecture called "Clinical Toxicology and Environmental Health." A learning objective from this lecture stated:

- Give examples of how environmental hazards disproportionately impact the least wealthy and most vulnerable populations and discuss how these increase existing inequalities in health.

1.10. Does your <u>medical school</u> 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:	2

Score explanation: The unequal regional health impacts of climate change globally were addressed to a moderate extent in the "Social and Community Health" (SCH) courses within the preclinical curriculum. In "SCH II", the lecture "Introduction to Immigrant, Refugee and Global Health" included the following learning objectives:

1. Describe global migration and Minnesota's refugee and immigrant population trends.
2. Discuss individual immigration stories, including push and pull factors.

Climate change and environmental conditions were briefly mentioned in this lecture as contributors to global migration. In "SCH IV", this topic was addressed through a planetary health group project in which students researched and presented on topics such as climate distress and ecoanxiety, food security, water-related disasters, extreme heat, air pollution, and displacement and refugee health. The extent to which a global lens was incorporated into research was largely left to students, and not all students were exposed to every topic, resulting in variability in the content each student received. As a result, global perspectives were present but not uniformly received by all students.

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

1.11. Does your <u>medical school</u> curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides, microplastics)?

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

Score explanation: There is a lecture in the required core curriculum "Endocrine and Reproduction" course titled "Endocrine Disrupting Chemicals" where there were four course objectives related to environmental exposures:

- Define endocrine disrupting chemical (EDC)
- Give examples of EDCs, common sources of exposure, and adverse health outcomes associated with them
- Explain how EDCs may have different effects depending on the timing of exposure.
- Review steps on reducing exposure to EDCs

There are explanations as to where in the environment common EDC's are found and which pathways are affected by specific chemicals. There are explanations on how these chemicals build up through the food chain. Information given on how the impact of chemicals is rarely a linear relationship and how increasing exposure is typically an exponential impact.

1.12. Does your <u>medical school</u> 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:	3
Score explanation: In the "SCH I" course there is a lecture titled "Introduction to Urban Health in Communities" where there is extensive discussion on the impacts of the Smith Foundry on the East Phillips neighborhood of Minneapolis, specifically in relation to the increase in respiratory disease for children at a nearby day care. In the same course there is a separate lecture titled "Housing, Gentrification, Urban Planning & Health" that connects the construction pattern of the highway system in Minneapolis and Saint Paul with the areas where there are higher rates of asthma and COPD hospitalizations. There is another lecture in the course titled "Rural Environmental Disparity, Climate & Health Equity" that extensively covers topics like tree cover rate, impacts of man made climate change on vulnerable populations, and impacts of increasing number of severe weather events in the state due to climate change.	

1.13. To what extent does your <u>medical school</u> 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. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: In the required core curriculum course "Social and Community Health II" there is a slide on the lecture "Indigenous Determinants of Health" that addresses the environment as one of the social determinants of health. In a separate lecture in the same course titled "Climate Change, Displacement, and Health in Indigenous Communities" the course objectives related to the topic listed are below: ● Recognize the importance of place to Indigenous Peoples and the impacts on health of environmental degradation. ● Describe examples of the disproportionate impact of global warming on Indigenous peoples. ● Consider potential solutions to the short and long-term impacts of environmental changes (global warming and direct human caused) on Indigenous health. Throughout this course there is a focus on indigenous health, including a lecture taught by members of the indigenous community regarding how they interact with the health care system and how their own values play into the relationship between the health of the environment, the community, and the individual. Furthermore, other lectures in the course talk about water quality and how it relates to wild rice cultivation and the effect of climate change and pollution on traditional food sources.	

1.14. Does your medical school 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
Score explanation: As part of the initial phase of the SERVE curriculum, the outsized impact of environmental toxins on marginalized communities was explored through multiple lectures that have been discussed in previous explanations, including "Clinical Toxicology and Environmental Health" and "Social Determinants of Health." These sessions examined how social determinants of health–such as race and socioeconomic status–shape an individual's exposure to environmental hazards and their resulting health effects. A particular focus was placed on the impact of extreme heat due to climate change, highlighting how systemic inequities increase vulnerability. The lectures delved deeply into the connection between structural racism and environmental health disparities, demonstrating how historically embedded policies have led to disproportionate exposure to pollution and climate-related hazards, perpetuating health inequities across communities.	

Curriculum: Sustainability

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 point)	
Score Assigned:	3
Score explanation: The SERVE curriculum has a "Life Stages" thread that frequently addresses the value of a plant-based diet through several lectures. For example, there is a 2-part session addressing both health and environmental impacts of a plant-based diet. A session including information on the "Planetary Health Plate" served as a guide for dietary patterns. In the pre-session required lecture titled "Macronutrients and Clinical Correlations," the detrimental environmental impacts of the industrial production of meat as well as its impacts on the body when consumed were highlighted. There is a also a recurring graphic throughout the initial phase of the SERVE curriculum in the "Life Stages" related lectures that emphasizes the World Health Organization's nutrition recommendations intended to prevent and reduce non-communicable diseases: the diet should contain "diverse, nutrient-dense foods from basic food groups including	

vegetables, fruits, whole grains and cereals, dairy foods and animal and plant-based protein foods, while limiting foods and beverages high in saturated and trans fats, added sugars, and salt.”

1.16. Does your medical school curriculum address the carbon footprint of 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
Score explanation: As a part of the preclinical SERVE curriculum, the required second-year course “Social and Community Health IV” includes a lecture titled “Planetary Health Intro Presentations” which examines the environmental impact of healthcare. This session discusses the consequences of pharmaceutical spillover such as antibiotic resistance, disruptions to the reproductive fitness and general health of fish and other wildlife, and broader environmental contamination. The lecture also highlights the heavy environmental impact in the operating room, emphasising how anesthetic gases contribute to global warming and detailing specific interventions at the University of Minnesota. For example, desflurane and nitrous oxide are discouraged due to their increased potential for contributing to global warming. Other strategies include maintaining operating temperature between 64-72°F, keeping doors and windows to the operating room closed to optimize energy efficiency, and reducing unnecessary power consumption by turning off computers and Wi-Fi networks during off-hours. The session also addresses the environmental impact of medical waste, noting how reliance on single-use devices, limited availability of reusable equipment, and excessive sterile packaging contribute to the carbon footprint of healthcare systems.	

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)	1
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) .	2
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	1

environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)	
The impact of **inhalers** on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)	1
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

Score explanation: Although we did not have a single lecture dedicated to the environmental and health benefits of overmedicalization, over-investigation or over-treatment, the concept was woven into case-based learning examples throughout the SERVE curriculum. The emphasis put on this concept may have varied depending on the group facilitator, but the concept of avoiding overmedicalization and treatment was often woven into case based learning. Cases would often prompt students about which tests/labs/imaging were "necessary" as well as medications, and how critically thinking about what was necessary could benefit patients. The environmental benefit was not heavily emphasized. The idea of overutilizing resources without improving patient care was also emphasized by the "Delivery of Care" thread throughout the SERVE curriculum.

The environmental impact of healthcare and proposed methods for sustainable clinical practices is discussed in a second year lecture titled "Planetary Health Intro Presentations." It explores the pharmaceutical spillover and its consequences, global warming potential of anesthetic gases, the environmental impact of surgical healthcare as it relates to waste production in the operating room, and waste production in the healthcare setting as a whole including single use devices and sterile packaging. The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers was briefly mentioned in this lecture as well, although not emphasized as heavily as the other topics.

Strategies to implement a sustainable clinical practice that were presented include avoiding single use instruments and using reusable equipment when possible, switching off computers and lights during off hours, keeping operating room doors and hospital windows closed for temperature efficiency.

Several lectures and discussions focused on non-pharmaceutical management to improve comorbidities. One lecture titled "Diabetes and Lifestyle" suggested including mindfulness based stress reduction, meditation, or yoga/tai chi for depression, stress, and diabetes.

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 point)	
No, there are **not** strategies introduced for having conversations with patients about climate change. (0 points)	
Score Assigned:	2

Score explanation: In the second year lecture “Endocrine Disruptors,” the following steps to limit the exposure of endocrine disruptors caused by climate change included: avoiding canned food, fast food/beverages, ultraprocessed food, avoiding microwaving food or beverages in plastics, not cleaning plastics in the dishwasher, using alternatives such as glass or stainless steel, when possible avoiding plastics with recycling codes 3 (phthalates) and 7 (bisphenols) found on the bottom of products, and using cast iron and/or stainless steel pans instead of nonstick cooking materials. The first year lecture “Clinical Toxicology and Environmental Health” outlined how to take an exposure history, including toxic and environmental exposures. Minnesota specific exposures were highlighted.

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
Score explanation: Lectures in the required first year curriculum of the initial phase of the SERVE curriculum, including “Clinical Toxicology and Environmental Health” and “Social Determinants of Health” encourage students as future physicians to learn about a patient’s environmental exposures and how they might impact a patient’s comorbidities and wellbeing. The lectures highlight specific exposures in various areas of Minnesota to provide further guidance on areas of discussion amongst different patient populations. In the second year course “Social and Community Health IV,” students work through a planetary health group project on topics such as toxic exposures, vector borne diseases, pandemic preparedness, climate distress & ecoanxiety, food security, water-related disasters, extreme heat, air pollution, emerging zoonoses, pets & other animal sentinels, displacement & refugee health, and antibiotic resistance. Students learn how patients will present in the given scenarios, the questions that may lead you in the direction of a diagnosis, and how to treat certain illnesses.	

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

Score explanation: Implemented in Fall 2023, the initial phase of the medical school's SERVE curriculum focused on exploring the impact of climate change on human health. The longitudinal incorporation of environmental and planetary health into the curriculum is an important change compared to previous curriculum instruction. Topics from the "Public Health" thread, the "Life Stages" thread, and "Social and Community Health" courses have greatly improved the education of planetary health impacts at the intersection with patient wellbeing. Additionally, enduring topics addressing climate change and sustainable health further reflect the intentional expansion of environmental health education beyond isolated lectures.

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:	4

Score explanation: Planetary health and sustainable healthcare education topics are integrated into the core medical school curriculum. The recently introduced SERVE curriculum longitudinally addresses the health impacts of climate change within the preclinical years. Environmental health is introduced and integrated into first and second-year foundation organ-system blocks, SCH courses, and the Public Health thread. Topics of study include disease risks associated with toxic exposure, the cardiovascular impacts of air pollution, access to safe drinking water in rural Minnesota, links between green urban infrastructure and patient health, and health outcomes related to endocrine-disrupting chemicals.

Additionally, second year students participate in a case-based planetary health project to synthesize this content and examine the connection between environmental conditions and health outcomes. Although climate-health content is comprehensively taught from a broader curricular lens, there are limited opportunities for students to talk with patients about climate-health topics. During clinical years, the course "Occupational and Environmental Medicine" is offered, in which environmental health hazards are assessed in clinical settings. However, other patient interaction opportunities related specifically to planetary health are limited.

As the fourth-year SERVE curriculum has yet to be revealed, the long-term sustainability of these curricular changes will be more thoroughly assessed upon the first class's completion of the full curriculum. Future iterations will provide opportunities to evaluate and ensure longitudinal integration of planetary health as a key component of core pre-clinical and clinical medical 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

Score explanation: Two professors in the Medical School lead the public health thread in the current SERVE curriculum. The SERVE curriculum covers different biological organ systems in series, so pertinent planetary/public health and sustainable healthcare lectures and video recordings are provided throughout the breadth of the curriculum as they relate to the organ system currently being studied. This approach ensures increased integration of lecture content with planetary health perspectives. Several sessions involved bringing in guest speakers from local communities to provide commentary on the effect of climate change and sustainability practices on their peoples' health outcomes. As the curriculum continues to evolve, we hope the Medical School will continue to invite more guest speakers to provide their firsthand views on how their communities are being impacted.

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:	3

Score explanation: The SERVE curriculum offers lectures pertaining to public health during each organ block, often related to screening for relevant pathologies, as well as the mandatory course "Social and Community Health" (SCH) for all students during the pre-clinical training phase. SCH consists of weekly lectures designed to focus on core concepts in community health, social determinants, bias, and health equity. The course explores social health inequities and determinants of health using examples from around the world, and features physician and non-physician guest speakers from diverse communities to speak about their lived experiences. Parts of the course also have particular focus on highlighting disparities faced by socioeconomically underprivileged communities in the Twin Cities metropolitan and surrounding rural regions, which will undoubtedly aid students in their interactions with a diverse range of patients during the clinical phase of their training.

Section Total (67 out of 75)	**89%**

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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
Score explanation: The University of Minnesota has individual faculty members with primary focus on planetary health or sustainable healthcare research. Faculty examples are included below: Jessica Hellmann: “Hellmann studies the impacts of climate change on natural systems and strategies to reduce those impacts through adaptation and greenhouse gas emission reduction.She also works on interdisciplinary sustainability science and science communication through her leadership of the UMN Institute on the Environment.” Hyun Kim: “ My main research goal is to guard and to improve human health from climate change impacts and climate-induced disasters, by providing epidemiologic evidence, applying policy interventions, and implementing climate resilient infrastructure for both soft and hard.”	

2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution?
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 point)
There is **no** dedicated department or institute. (0 points)

Score Assigned:	3

Score explanation: The University of Minnesota has The Institute on the Environment (IonE), which is a research center that supports collaborative research across disciplines for initiatives related to sustainability and planetary health. Recent grants (Fall 2025) supports projects investigating AI's growing water footprint, what traditional fisherfolk songs reveal about environmental occurrences throughout history, and environmental DNA (eDNA) monitoring to detect invasive aquatic species among more.

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

Score Assigned:	3

Score explanation: As part of the Program in Health Disparities Research (PHDR), the University of Minnesota (UMN) has taken the initiative to create Community-base Participatory Research (CBPR) which entails the unification of academic research and the community. This partnership is designed so that community members must serve as active and equal participants throughout the entirety of a given project. This participation includes creation of ideas and procedures that address specific needs in a community. The PHDR itself is composed of board members that are researchers at UMN and community members that are representatives of health agencies and non-profit organizations. The board governs key decisions and strategic direction for PHDR activities. Collaborators of PHDR include: American Indian Cancer Foundation, Robbins Urban Wellness Retreat, Clinic-Based Youth Development Program for Latino Youth and Families, Domestic Abuse Project, Somali Latino and Hmong Partnership for Health and Wellness (SoLaHmo), among other partners. PHDR resources that have been co-developed with SoLaHmo include Partnership Protocol Executive Summary, Partnership Protocol, SoLaHmo Partnership Action Steps, and Research Partnership Checklist.

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
Score explanation: The University of Minnesota has a website dedicated to sustainability at the UMN. It outlines the climate action plan, programs relating to sustainability, sustainability on campus and how to get involved.	

2.5. Has your institution 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:	2
Score explanation: The University of Minnesota hosted Code Blue for Patient Earth in 2024, a climate-change and health conference. The event was organized through the School of Nursing and the student organization Healthy Professional for Healthy Climate (HPHC) in partnership with Advocates for Better Health and Minnesota Doctors for Health Equity. The conference brought together more than 100 health professionals and climate experts to co-create strategies that address climate change in healthcare. The University of Minnesota School of Nursing also hosted an Annual Planetary Health Guest lectureship from 2021-2024. The talk in 2022 was titled "Decarbonizing Health Care- an Urgent Challenge and Opportunity for Change" with speaker Dr. Elizabeth Schenk, PhD, RN, FAAN, Executive Director for Environmental Stewardship for the Providence Health system. In 2024 the talk was titled "Remembering our ecological purpose:	

Indigenous food systems and the promise of homo sapiens" with speaker Lyla June Johnston, an Indigenous musician, scholar, and community organizer of Diné (Navajo), Tsétsêhéstâhese (Cheyenne) and European lineages. She utilizes her studies of Human Ecology at Stanford, graduate work in Indigenous Pedagogy, and the traditional worldview she grew up with to inform her music, perspectives and solutions.

2.6. Is your <u>institution</u> 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 point)	
No, the institution is **not** a member of such an organisation. (0 points)	
Score Assigned:	1
Score explanation: Several schools within the University of Minnesota are members of the Planetary Health Alliance and Global Consortium on Climate and Health Education. The UMN School of Nursing and UMN Institute on Environment are members of the Planetary Health Alliance. UMN Medical School, UMN School of Nursing, UMN School of Public Health, and UMN Center for Global Health and Responsibility are members of the Global Consortium on Climate and Health Education.	

Section Total (15 out of 17)	**88%**

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Community Outreach and Advocacy

Section Overview: ***This section evaluates a school's 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 participates in community focused events relating to planetary health. (1 point)	
No, there is **no** such meaningful community partnership. (0 points)	
Score Assigned:	3

Score explanation: The University of Minnesota School of Nursing has partnerships with multiple community organizations. Many partnerships are formed through The Center for Planetary Health and Environmental Justice within the School of Nursing (The Center).

Local organizations include:
Regional Sustainable Development Partnerships (RSDP)- Working within the community, and to support student involvement, community identified projects are identified to support four areas of focus: sustainable food, clean energy, natural resources and resilient communities.
https://extension.umn.edu/regional-partnerships

Wiseman Art Center- Through the Center for Planetary Health and Environmental Justice, and within the School of Nursing, co-sponsored exhibits open to the public address issues revolving around food, land, water and environmental justice.
https://wam.umn.edu/

The Center also has a partnership with Little Earth and Change Narrative to support Indigenous and community voices via story telling and expressive arts related to land, health and resilience.
https://www.littleearth.org/

National/International organizations include: The International Council of Nurses to promote Planetary Health internationally.
https://nursing.umn.edu/news-events/planetary-health-not-some-all

Planetary Health Alliance: Co-creation of research and knowledge, the Planetary Health Alliance offers opportunities for international collaboration with faculty and The Center playing a leadership role on the board of directors. Angelica Walton serves as Research & Scholarship Director of the North American Regional Hub.
Yvonne Mongare (BSN Student) serves as Youth Director for North America Regional Hub.
https://planetaryhealthalliance.org/regional-hubs/north-america/

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** has not offered such community-facing courses or events. (0 points)	
Score Assigned:	3
Score explanation: The Center is in partnership with the Robert J. Jones Urban Research and Outreach-Engagement Center (UROC) and delivers weekly community education to North Minneapolis Civic Scholars (high school students) on air quality measures and home air sensing strategies. https://uroc.umn.edu/ The Center works in partnership with The Planetary Health Alliance to deliver monthly webinars open to the community on topics spanning planetary health in education, research, leadership, and systems change. https://planetaryhealthalliance.org/regional-hubs/north-america/	

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:	2
Score explanation: The Center for Planetary Health and Environmental Justice produces a weekly newsletter, authored by Dr. Angelica Huston, Director of The Center for Planetary Health and Environmental Justice. This newsletter is released to the school of nursing faculty and students.	

Topics encompass a broad range of topics, upcoming webinars and learning opportunities pertaining to planetary health.

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 providers. (1 point)	
There are **no** such accessible courses for post-graduate providers. (0 points)	
Score Assigned:	2
Score explanation: Through partnership with Health Professional for a Healthy Climate, the Advancing Resilient and Climate-ready Healthcare (ARCH) committee provides post-graduate professionals with tools, peer groups and trainings on strengthening climate resilience. https://hpforhc.org/arch/ The Center for Global Health and Climate Responsibility is an interdisciplinary response curriculum that provides education to health professionals that connects the impacts of environmental health to human health. An educational slide deck is available to all individuals. https://globalhealthcenter.umn.edu/climate-change-and-health-curriculum	

3.5. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about environmental health exposures?	
Yes, the **institution** 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:	1
Score explanation: M Health Fairview has readily accessible education material for patients that address multiple environmental health hazards with a comprehensive list of causes, symptoms, diagnostic tools and treatment. https://www.mhealthfairview.org/resources/healthlibrary M Health Fairview has a webpage dedicated to educating patients about lung cancer and the risks associated with environmental hazards. https://www.mhealthfairview.org/blog/what-to-know-about-lung-cancer?	

Veterans Affairs offers information on environmental health hazards and describes the process for receiving a full assessment for such hazards.
https://www.publichealth.va.gov/PUBLICHEALTH/MEEA/index.asp

Abbott Northwestern Hospital provides a webpage with a broadcast from WCCO-TV in 2023 discussing the impacts of the environment on health.
https://www.allinahealth.org/allina-news/2023/11/your-environment-plays-a-critical-role-in-your-heart-health

Hennepin County Medical Center did not have materials available on their website that provides education to patients about environmental health exposures.

3.6. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about the health impacts of climate change?	
Yes, the **institution** 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 hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	1

Score explanation: The Veterans Affairs website offers a webpage accessible to patients regarding environmental stewardship under the section *Environmental Management*. It lists the current activities that include environmentally preferred purchasing, pollution prevention, and environmental management. However, it does not directly address the impact of climate change on human health.
https://department.va.gov/administrations-and-offices/management/asset-enterprise-management/energy-environment-and-fleet-program/The

Abbott Northwestern Hospital has a robust webpage that is easily accessible to patients that discusses the environmental sustainability measures that the hospital takes. There is a statement that taking care of the environmental is critical to human health, but does not further elaborate.
https://www.allinahealth.org/abbott-northwestern-hospital/campus-updates/environmental-sustainability

Hennepin County Medical Center did not have materials available on their website that provides education to patients about impacts of climate change on human health.

M Health Fairview did not have materials available on their website that provides education to patients about impacts of climate change on human health.

Section Total (12 out of 14)	**86%**

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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, the institution does not offer opportunities or support for sustainability initiatives or QI projects. (0 points)	
Score Assigned:	2
Score explanation: At the UMN, there are multiple pillars of support for students interested in sustainability and quality improvement initiatives. The grant "Sustainable Development Goal Initiative Student Group Activity Grant" allows all students to apply for up to $500 to help fund activities and events for student programs and organizations. Also, Global Engagement Grants (ranging from $1,500 to $15,000) offered by the Center for Global Health and Social Responsibility provide additional financial support for sustainable health efforts. Additionally, the Institute on the Environment (IonE) offers smaller grants to help students address environmental and sustainability issues across the UMN, which can be up to $3000.	

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 them 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*

Score explanation: Within the broader University of Minnesota community, several interdisciplinary opportunities support student engagement in environmental and planetary health research. The Institute on the Environment (IonE) participates in the Graduate School's Interdisciplinary Doctoral Fellowship program, which provides mid-career Ph.D. students engaged in interdisciplinary research the opportunity to study at an interdisciplinary research center or institute during their fellowship year. Fellows within IonE receive $2,000 in funding to support research addressing global environmental challenges. IonE has also historically offered Mini Grants of up to $3,000 to support student-led projects addressing environmental and sustainability issues across the UMN system, including 10 different projects in Adaptation, Mitigation, Biodiversity, Clean Energy, Water & Land, Food Systems, Planetary Health, Environmental Justice, Natural Capital, and Decision Support.

Additional research-related opportunities exist across the university. For example, the University of Minnesota Global Programs and Strategy Alliance (GPS Alliance) provides awards through its Sustainable Development Goal Initiative research grant competition; however, these awards are designed for faculty, staff, and researchers, meaning students must join an existing project led by a principal investigator. Similarly, Advancing Climate Solutions, Now., launched in 2021 in honor of University of Minnesota leader Tom Swain, engages students in climate change solutions through policy-focused internships and research initiatives. While student grants are currently on pause, project teams may still submit proposals directly to the Center for Science, Technology, and Environmental Policy.

Students in the Health Innovation and Leadership DNP program can choose to focus on Planetary Health and are encouraged to pursue DNP projects in this area. Faculty are actively engaged in related research, including nature-based therapeutics and healthy eating for a healthy planet, providing mentorship opportunities for Ph.D. candidates conducting interdisciplinary research as well as undergraduates exploring these topics. The curriculum also includes the elective course NURS 8212: Planetary Health—Cross-Cutting Principles for Nursing Research, which examines how human-driven ecosystem transformations impact global health. Through analysis of scientific evidence and ethical considerations, students identify opportunities for nursing research and theory development that promote planetary health.

4.3. Does the institution 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 institution, 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

Score explanation: The University of Minnesota maintains a central Office of Sustainability website, established in 2022, that serves as a hub for sustainability-related initiatives. The site includes information on the University's Climate Action Plan, a Sustainability Dashboard tracking waste and emissions, ongoing projects, publications, and contact information for sustainability leadership, as well as a research unit search tool aligned with the Sustainable Development Goals.

Several departments and centers also support planetary health efforts across the University. The Center for Global Health and Social Responsibility's "Climate Change and Health" page highlights Climate Champions from multiple health professional schools, including the medical school. The School of Nursing contributes through its Center for Planetary Health and Environmental Justice, which focuses on education, research, and practice in planetary health and provides information on current projects and key leadership, including Dr. Teddie Potter. Additional resources are available through the Office of Academic Clinical Affairs and the University of Minnesota Sustainable Development Goals Initiative, which aligns planetary and human health efforts with the University's MPact 2025 commitment.

4.4. Does your institution 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 institution 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

Score explanation: At the University of Minnesota Twin Cities, Health Students for a Healthy Climate (HSHC) is a registered student organization composed of health professional students who aim to understand and address the health impacts of climate change through interdisciplinary collaboration, advocacy, and education. This group recognizes the connections between environmental change and health outcomes and provides a forum for students to engage in discussions and activities around climate-related health challenges.

Additionally, several other student organizations engage in sustainability or health advocacy that intersect with planetary health themes, such as the Public Health Advocacy Student Alliance (PHASA), which empowers students to improve health disparities through policy and advocacy measures; while not exclusively climate-focused, it includes components related to environmental health engagement; and groups like Health Sciences Interprofessional Student Garden, which connects health students around sustainable environmental practice.
These student organizations operate with faculty mentorship or organizational support through the Center for Health Interprofessional Programs (CHIP), which houses and supports interprofessional student groups, including HSHC and other advocacy organizations.

4.5. Is there a student liaison representing sustainability interests who serves on a department or institutional decision-making council to advocate for curriculum reform and/or sustainability best practices?	
Yes, there is a student representative who serves on a department or institutional decision-making council/committee. (1 point)	
No, there is no such student representative. (0 points)	
Score Assigned:	1

Score explanation: Yes, the University of Minnesota (UMN) involves students in sustainability-related engagement through Twin Cities and Systemwide sustainability teams. This committee supports UMN's goal to "build a fully sustainable future" across operations, teaching, research, and outreach, and includes undergraduate, graduate, and doctoral students who collaborate with faculty and staff on sustainability initiatives and climate action planning.

Additionally, there are student liaisons on the UMN Twin Cities Sustainability Council, which supports the implementation of one of UMN's MPact 2025 goals of "Build a fully sustainable future". This team has been tasked with guiding the implementation of this goal, the related actions, and the Board of Regents Policy Sustainability and Energy Efficiency on the Twin Cities campus.

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 explanation:

- The University of Minnesota's St. Paul campus organizes Cornercopia, which is a student-driven organic farm that provides firsthand opportunities to run all facets of the farm, including planning, growing, and marketing. This provides opportunities for courses, internships, and volunteer work. Additionally, the Center for Health Interprofessional

Programs runs the Interprofessional Student Garden, where 5-7 health professional students manage all of the garden operations and events.

- The University of Minnesota hosts a Sustainability Coffee Chat Series, which engages the community regarding climate sustainability to increase awareness and encourage collaboration. Some topics include “UMN Zero Waste Plan”, “On-Campus Solar”, and “Net Zero Buildings”.
- As part of Earth Month 2025, the University of Minnesota hosted events that connected students with Twin Cities community members and organizations focused on environmental justice and climate action. Additionally, the Institute on the Environment hosts an annual Environmental Justice Summit, an open sustainability symposium where faculty, staff, students, and community members share research, projects, and best practices.
- University of Minnesota’s Bell Museum is hosting an exhibition called “Wonder: Experiences of Nature, Curiosity, and Play!”. The exhibition will include opportunities to make your own lavender sachet with the U’s Bakken Center for Spirituality & Healing, contribute to a kinship mandala community art project, and connect with the Center for Planetary Health and Environmental Justice.
- The University of Minnesota offers an opportunity to volunteer with the Environmental Student Association to build community resilience through environmental sustainability projects. Additionally, the Phillips Neighborhood Clinic, a student-run clinic focused on providing free care to underserved patients, organizes neighborhood clean up opportunities.
- Many organizations organize wilderness and outdoor activities, such as hiking, including the UMN Outdoors Club and the UMN Forestry Club. Additionally, the Center for Interprofessional Health offers Ecohealth Quests, where health professions students engage in overnight nature experiences and learn about One Health topics.

Section Total (15 out of 15)	**100%**

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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 institutions, 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
Score explanation: There is an Office of Sustainability at UMN with multiple staff members, but no specific staff member is in charge of medical school sustainability. UMN's major hospital affiliation, M Health Fairview, does outline their sustainability efforts focused in 7 areas (energy efficiency, environmental preferable purchasing, sustainable facility design, healthy food systems, waste reduction and recycling, water conservation, and employee engagement), but this does not include medical school campus facilities or operations, nor is there a specific staff member in charge of hospital sustainability. The University of Minnesota also hired the first systemwide chief sustainability officer, Shane Stennes, in May of 2022 to help lead sustainability efforts across all five campuses as part of the MPact effort. Additionally, the University of Minnesota has a multidisciplinary team of Climate Champions, which includes Dr. Vishnu Laalitha Surapaneni, the medical school representative, which aims to "connect students with faculty and community members working in health care, sustainability, and climate change."	

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 does **not** meet any of the requirements listed above (0 points)	
Score Assigned:	0

Score explanation: In 2008, the University of Minnesota (UMN) signed the American Universities and Colleges Presidents' Climate Commitment, committing to carbon neutrality by **2050**. The University system comprises five campuses across the state, and each has published a climate action plan (CAP) detailing their next decade of intentions toward the 2050 goal. UMN reported a systemwide 50% decrease in net emissions from 2008 to 2021. For UMN's largest campus, UMN-Twin Cities, their recent CAP identifies five emission categories, and for each it outlines goals, performance indicators, and implementation strategies. A few of the strategies discussed included increasing renewable energy production, accelerating sustainable building design standards, supporting infrastructure that favors biking, walking, transit, and electric vehicles, and procuring more sustainable options or offsets for University-sponsored air travel. Despite plausible future progress in reducing emissions, the 2050 timeline corresponds to a score of zero for this rubric.

5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?

Yes, 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

Score explanation: The University of Minnesota (Twin Cities campus) energy use for 2025, based on communications with the Office of Sustainability, was comprised of 4,021,855 gigajoules of non-renewable energy and 288,223 gigajoules of renewable energy, for a total of 4,310,078 gigajoules of total energy usage. This calculates to approximately 6.7% of the campus' energy coming from renewable energy sources. As of October 2024, the EPA ranked the University of Minnesota Twin Cities as #25 in the nation in regards to annual green power usage (16% green power of total electricity use).

The UMN self-reported STARS report (January 2026, in the process of being published) indicates 6.69% of the University's total energy usage comes from clean and renewable sources. This is an improvement from 4.99% reported in the January 2023 STARS report. In addition, >50% of the university's energy consumption is supplied by purchased gas and steam as reported on the university's energy dashboard. This dashboard is easy to access and includes building-specific energy dashboards, demonstrating the university's transparency related to energy consumption.

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:	3
Score explanation: New construction and major renovations follow interior design standards that incorporate the University's Sustainability Requirements and follow Minnesota's B3 Guidelines. Compliance with B3 requires meeting sustainability goals for site, water, energy, indoor environment, materials, and waste. The University tracks the energy consumption of most buildings on campus on a public dashboard and the integration of sustainable practices are tracked on the facilities management strategic progress card. In the University of Minnesota Twin Cities Campus Master Plan, they have Development and Redevelopment as a goal under their sustainability framework. They note that "The Campus plan envisions significant reinvestment in existing buildings in the campus cores. However when campus needs cannot be accommodated through renovation, critical decisions about growth must consider resilience and mitigation, land use impacts, and the capacities of supporting utilities and infrastructure (energy, water, waste, vegetation, etc.)." The UMN highlights many of the updates they have made, including the addition of solar gardens, green roofs, LEED buildings, stormwater retention, and energy plant renovations on the Sustainability Walking Tour. Nearly 70% of campus buildings have been retrofitted with LED lights in place of the existing fluorescent lights. The university has also made a concerted effort to retrofit all buildings that have an established pattern of bird-glass collision through their "Stop the Thud" project.	

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
Score explanation: The University of Minnesota- Twin Cities Medical School is located right next to the electrically powered light rail which many students take advantage of. All students who pay	

the Transportation and Safety fee, which is included in the cost of tuition, have unlimited access to the regional transit system in the Twin Cities area through the Universal Transit Pass. The university provides a free shuttle bus service between its three Twin Cities campuses (West Bank, East Bank, and Saint Paul). University Services has a webpage dedicated to transit, with information and links readily available regarding public transportation, bike routes with travel times, and walk routes with pedestrian safety/security resources. The carpool service, Gopher Chauffeur, is available to students daily during the school year from 8 pm to 1 am to provide safe transportation to students. The UMN Twin Cities is recognized nationally for bicycle transportation. Furthermore, the campus is not amenable to cars, as there is almost no free parking on campus. Most of the major hospital sites (Regions, Hennepin County Medical Center, MN VA Medical Center, Abbott Northwestern Hospital, East Bank Hospital, West Bank Hospital) for rotations are easily accessible via either light rail or a major bus line and would not require a car to access easily. Campus-wide transit reports can be found here for the 2024 fiscal year as the most recent published usage data.

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 institution. (0 points)	
Score Assigned:	2
Score explanation: The medical school has both an organics and a conventional recycling program in its buildings. In many of the common areas of the medical school buildings, including the main hallways, main lobbies, elevators, and vending machine coves, there are 3-in-1 waste bins with associated images above each section to help guide students/faculty/visitors as to which bin is most appropriate. The UMN also offers a ReUse Program to collect surplus office supplies and equipment that can be resold or redistributed. This service is accessible to medical students and staff. The university tracks its waste recovery per year by material on a dashboard. This information includes buildings utilized by the medical school. Facilities at the university also offer assistance in hosting "Zero Waste Events" through planning, signage, or extra bins that are supplied for most outdoor events (areas where compost and recycling bins are not commonly found). At the same website, the UMN has a feedback form where any individual can submit ideas to help the University improve its waste management system	

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

Score explanation: According to the Dean's office, the Medical School does not have any input on campus food and beverage selections or their sustainability. On the campus level, dining services are provided by M Food Co, and their vendor is Chartwells. The University has established food systems as one of their sustainability priorities and they work with Chartwells to create sustainability requirements, goals, and initiatives. These initiatives include the Monterey Bay Aquarium Seafood Watch program guidelines, the Waste Not program which measures the amount of food waste being generated, and Chartwells' HowGood Partnership which introduces climate labeling in dining halls. Chartwells also has a plant-forward dining initiative, but it does not appear that the University of Minnesota is directly participating in this initiative. The University does offer vegan and vegetarian options in most dining locations on campus and highlights nutrient rich foods available through their Feel Good Foods campaign. The University also hosts a farmers market every Wednesday from July-August where students and community members can purchase fresh produce and hosts the Nutritious U Food Pantry every Wednesday and Thursday where all students are welcome to get free fresh foods. M Food co is committed to continuously searching for new ways to reduce their carbon footprint and increase sustainability.

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

Score explanation: On a campus level, according to the Office of Sustainability, the University applies sustainability criteria to some procurement activities depending on the type of product/service being procured (e.g. yes to construction materials, office supplies; no to specialized research materials). In the Board of Regents Purchasing Policy, they state "purchasing activities shall be conducted in a manner that promotes integrity, stewardship, diversity, and sustainability," but offers no additional guidelines. The University's Office of Sustainability, in conjunction with its educational campaign "It All Adds Up," assists with the implementation of environmental, social, and economic goals with respect to supplier diversity and sustainability.
According to the Office of Sustainability, sustainability guidelines are applied when purchasing furniture and furnishings, IT equipment, and food service providers. Sustainability considerations are put into practice when purchasing cleaning agents, office paper, and the procurement of vehicles for fleet. Sustainability measures are taken into account for some but not all consumable

office products, garments and linens, professional service providers, or for university-sponsored travel.

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:	1
Score explanation: There are sustainability recommendations for events hosted at the institution, including those hosted at the medical school, although these are recommendations rather than requirements. The Office of Sustainability provides guidance on sustainable purchasing and planning for campus events, encouraging students to limit waste, choose compostable materials, and consider energy-conscious planning. The office also provides sustainable considerations during each step of the event's planning process. There is an updated Student Council policy regarding funding events provided by the Medical School Finance Office to avoid over-ordering food while reducing tableware requests from vendors. The University Zero Waste Services provides a list of Zero Waste Event Caterers and Zero Waste Purchasing Options to promote sustainability when hosting events. While the school strongly recommends sustainability measures, they are not required.	

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
Score explanation: The University of Minnesota Office of Sustainability launched the Green Labs program in 2020, with the aim of creating more environmentally sustainable lab spaces through improved knowledge, accessibility, and engagement in sustainable recycling practices and energy conservation efforts. The office has created a communal lab composting program for disposal of non-contaminated disposable paper items (paper towels and Kim wipes), offered free customized lab recycling audits, and created online guides on maximizing energy efficiency (freezer, fume hoods, misc. lab equipment) and sustainable recycling practices (organics, plastics, Styrofoam). The Green Labs program also offers customized virtual presentations for labs interested in learning more about sustainable recycling practices and is collecting baseline energy metering data from participating labs to provide feedback on improved practices.	

The university also publishes an interactive carbon dashboard containing data from 2008-onwards detailing net total carbon emissions and emissions per source. During this time, the university has decreased total carbon emissions by 51%.

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:	2
Score explanation: The University of Minnesota Office of Investments and Banking (OIB) is committed to considering Environmental, Social and Governance (ESG) principles in investment decisions and has published data on their webpage regarding fossil fuel-related endowment exposures. The University of Minnesota Consolidated Endowment Fund (CEF) had a 1.6% fossil fuel-related exposure in 2025. This was significantly decreased from the 2.5% exposure in 2023 and 1.7% exposure in 2024. Of the 1.6% of the fund currently invested in fossil fuels, one half (0.8%) is currently being liquidated while the other one half (0.8%) is tied up in public index funds. On the same website, the university also published that 40% of public equity is invested in Environmental, Social and Governance (ESG)-aware and low carbon funds.	

Section Total (19 out of 32)	**59%**

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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 Minnesota School of Medicine.
The following table presents the individual section grades and overall institutional grade for the University of Minnesota School of Medicine on this Planetary Health Report Card.

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	(67/75) x 100 = 89%	A
Interdisciplinary Research (17.5%)	(15/17) x 100 = 88%	A
Community Outreach and Advocacy (17.5%)	(12/14) x 100 = 86%	A
Support for Student-led Planetary Health Initiatives (17.5%)	(15/15) x 100= 100%	A+
Campus Sustainability (17.5%)	(19/32) x 100 =59%	C+
Institutional Grade	**(89x0.3 + 88x0.175 + 86x0.175 + 100x0.175 + 59x0.175) = 85%**	**A**

Report Card Trends

Section Overview
This graph demonstrates trends in overall and section grades for the years in which University of Minnesota Medical School has participated in the Planetary Health Report Card initiative.