



Planetary Health Report Card

Creighton University

School of Medicine



2022-2023 Contributing Team:

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Summary of Findings

Overall	C
<u>Curriculum</u>	C-
<ul style="list-style-type: none"> • Creighton School of Medicine (SOM) established a Planetary Health & Sustainability Horizontally Integrated Discipline in 2021. This track is intended to provide longitudinal education on Planetary Health (PH) and Sustainability. There have only been two lectures presented in this discipline. • Creighton SOM briefly covers the effects of climate change and health epidemiology in a few of the M1 and M2 system-based blocks. However, this could be covered in greater depth and extended to all blocks. • Recommendations: The SOM can improve by ensuring that PH topics are integrated into all curricular tracks as well as clerkship years. Specifically, there are opportune Case Based Learning sessions that could incorporate PH-related issues and sustainable treatment options. These efforts will promote longitudinal learning and awareness of the pathophysiology as well as social processes implicated in PH. 	
<u>Interdisciplinary Research</u>	B
<ul style="list-style-type: none"> • The SOM has connections to interdisciplinary planetary health research through Creighton’s Masters of Public Health. However, it is not clear how many faculty members research planetary health issues and students’ knowledge of this potential collaboration is limited. • Creighton SOM is supportive of and helps sponsor the Global Health Conference Midwest, a key platform for PH education and research advancement. • Recommendation: With the addition of the Research Chair position in the SOM’s Student Government this year, there is opportunity to establish a stronger relationship with faculty in the MPH program. 	
<u>Community Outreach and Advocacy</u>	C-
<ul style="list-style-type: none"> • Students in the SOM volunteer at a variety of community organizations that promote planetary and environmental health, however, the school is not in a formal partnership with these organizations. • Recommendations: Creighton can advocate for its hospital affiliates to offer patients accessible materials on the health impacts of climate change, such as education on the symptoms of heat stroke during severe heat waves. A particular opportunity for this would be during the Magis Free Clinic for patients without insurance. Formal partnerships with community organizations focused on planetary health would be beneficial for students and the community. 	
<u>Support for Student-Led Initiatives</u>	B
<ul style="list-style-type: none"> • The SOM created a Planetary Health and Sustainability Task Force (TF) in response to the 2020 PHRC. The TF houses a branch for student-initiated PH projects. Overall, the SOM has avenues for support and funds. Lack of awareness of programs and few PH-focused faculty mentors limit sustainability initiatives. • Recommendations: Institutional attention on PH and online publication of efforts would help engagement. 	
<u>Campus Sustainability</u>	D+
<ul style="list-style-type: none"> • Creighton’s Office of Sustainability is leading a slow but deliberate movement toward Creighton’s sustainability goals. It plans to reduce carbon emissions by 50% by 2028 and reach carbon neutrality by 2050. We encourage the school to reset its carbon neutrality goal to sooner than 2050. • There is a need for more sustainable building practices, <i>particularly in the new medical school building.</i> • Recommendations: The SOM lacks sustainability practices seen around Creighton, such as composting. The SOM should reconcile these differences and develop its own rigorous sustainability standards. 	

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 analyzing 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, urbanization, biodiversity shifts, natural disasters, climate change, changing land use and land cover, global pollution, and changing biogeochemical flows. The health of humanity is dependent on our environment, and our environment is changing rapidly and in disastrous ways. Although the World Health Organization has called climate change “the greatest threat to global health in the 21st century,” many medical school’s institutional priorities do not reflect the urgency of this danger to human health.

As future health professionals, we must be prepared to address the impacts of human-caused environmental changes on our patients’ health. This preparation is in the hands of the institutions providing our medical training. It is imperative that we hold our institutions accountable for educating medical students about the health impacts of climate change and other anthropogenic environmental changes, generating research to better understand health impacts and solutions, supporting related student initiatives, embracing sustainable practices as much as possible, and engaging with surrounding communities that are most affected by environmental threats. Because climate change and environmental threats disproportionately affect vulnerable populations (for example, communities of color, 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 medical schools, we have created a Planetary Health Report Card that medical students internationally can use to grade and compare their home institutions on an annual basis. This medical-student-driven initiative aims to compare medical 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 centered on environmental health impacts 5) medical school campus sustainability.

Definitions & Other Considerations

Definitions:

- **Planetary Health:** is described by the Planetary Health Alliance as “the health of human civilization and the state of the natural systems on which it depends.” For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional ‘environmental health’ examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of medical school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term “planetary health” to satisfy the metric.
- **Sustainable Healthcare:** As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.
- **Education for Sustainable Healthcare (ESH):** is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
 1. Describe how the environment and human health interact at different levels.
 2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
 3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- **Medical School vs. Institution:** When “medical school” is specified in the report card, this only refers to curriculum and resources offered by the School 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. Any resource reasonably accessible by medical students, no matter where in the institution the resource comes from or if it is specifically targeted for medical students, can meet this metric.

- **Environmental history (Metric #19 in Curriculum Section):** This is a series of questions providers are taught to ask during medical encounters that elicit 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 mold 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.
- **Elective:** The word "elective" refers to an optional course or lecture series that a medical student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- **Clerkship:** 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 or placements.

Other considerations:

- If there are more than one "tracks" at your medical school 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).

Added to our resources last year, the Planetary Health Report Card [Literature Review by Metric](#) collates the evidence behind each of the metrics in the Planetary Health Report Card. It serves as a collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

Planetary Health Curriculum

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

Curriculum: General

1. Did your <u>medical school</u> offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
3	Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year.
2	Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year.
1	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.
0	No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.
<p><i>Score Explanation: Creighton University School of Medicine offers a Student Interest Selective titled "Restorative Recreation" to both M1 and M2s. This elective goes over Laudato Si and how it relates to care for our common home and also explores the benefits of nature in relation to human health. During this elective, students are asked to engage with the effects, including the health effects, of the degradation of our common home. While this selective does a great job at deepening students' understanding of the need of nature in the human experience, we do not think that it succeeds in delving deep into topics directly related to planetary health such as climate change, natural disasters, changing infectious diseases, food systems, etc.</i></p> <p><i>Although Creighton University does not offer extensive Student Interest Selective options focused on planetary health, our students are offered mission trips to different parts of the world such as the Dominican Republic. Our peers explore the impact of change in climate, pollution, and the importance of air quality on its habitants.</i></p>	

Curriculum: Health Effects of Climate Change

2. Does your <u>medical school</u> curriculum address the relationship between extreme heat, health risks, and climate change?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.

1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>Score explanation: In a lecture called “Planetary Health: Existential Threats and Clinical Opportunities” multiple slides show the links between heat, climate change, and the effects that this has on human health, including emphasizing the interplay of heat on infectious disease, respiratory disease, heat stroke, mental health, and chronic diseases. Although a few lectures were dedicated to this subject, the information covered could be expanded more to include the effect of climate change on specific regions of the world, especially regions of the United States. The effect of climate change on food/water resources, and how these factors affect human health could be better explored.</i></p> <p><i>The M2s were given a Case Based Learning (CBL) on heat stroke and hypothermia which covered the relationship between extreme heat and health risks, but this was never directly connected to increased global temperatures due to climate change.</i></p>	

3. Does your <u>medical school</u> curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>Score explanation: The M2s had a CBL on hypothermia as well as a separate CBL on heat stroke where the effects of extreme heat and cold were explored. Additionally, the physiological effects that increased heat has on the body were addressed.</i></p> <p><i>Other schools have entire lectures focused on the health effects of hurricanes, earthquakes, fires etc. For Creighton students in Omaha, it would be beneficial to focus on health presentations following heat, cold weather, and flooding exposures. It is imperative to integrate this metric into multiple lectures and CBLs to increase longitudinal learning. Additionally, we recommend addressing the impacts of extreme weather events on the healthcare system as a whole by emphasizing, for example, the cost of treating increased incidence of heat stroke as well as the cost of damages from storms and flooding.</i></p>	

4. Does your <u>medical school</u> curriculum address the impact of climate change on the changing patterns of infectious diseases?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

Score explanation: This was briefly covered by an Infectious Disease lecturer who addressed the increasing incidence of Chagas disease further North due to climate change. This was also generally discussed in relation to vector-borne diseases in a lecture titled “Infectious Disease with Multisystem Consequences.”

5. Does your medical school curriculum address the respiratory health effects of climate change and air pollution?

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

*Score explanation: This topic was briefly introduced in a Gold Track lecture on “Planetary Health: Existential Threats and Clinical Opportunities.”
The school of medicine curriculum does not address respiratory health in relation to effects of climate change and air pollution in the pulmonary block.*

6. Does your medical school curriculum address the cardiovascular health effects of climate change, including increased heat?

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

Score explanation: The M2s had a CBL on hypothermia as well as a separate CBL on heat stroke where the effects of extreme heat and cold were explored. These CBLs focused on the effect of extreme climate on the autonomic system as opposed to the cardiovascular system. In the Cardiology block, the curriculum did not address the effect of climate change on the organ system.

7. Does your medical school curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

Score explanation: This is covered extensively in the selective “Restorative Recreation.” This elective emphasizes the impacts of an “increasing disconnectedness to nature on human health” and focuses on how reestablishing a physical connection with earth through nature immersion can ameliorate these effects. This was also briefly addressed in a Gold Track lecture on Planetary Health, but was not sufficiently covered in Brain and Behavior or Neuroscience Blue Track sessions.

8. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

Score explanation: This was covered briefly in a Case Based Learning module given the first week of school to the M1s where students were asked to evaluate the physical environment and access to clean water and food as it relates to the social determinants of health.

9. Does your medical school curriculum address the outsized impact of climate change on marginalized populations such as those with low SES, women, communities of color, Indigenous communities, children, homeless populations, and older adults?

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

Score explanation: At Creighton University School of Medicine in the M1 Gold track lecture “Introduction to Planetary Health”, a video assigned as prework mentioned communities that are disproportionately impacted by climate change. During the lecture, students were given time in small groups to discuss how climate change impacts the health of vulnerable and marginalized groups. While this lecture was a good introduction to how climate change poses health impacts on communities, this topic was not explored in depth.

10. Does your medical school curriculum address the unequal regional health impacts of climate change globally?

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.

0	This topic was not covered.
<p><i>Score explanation: Creighton medical students have the opportunity to attend medical mission trips to locations such as the Dominican Republic. Through these experiences, the students learn and see firsthand how climate change affects the availability and effectiveness of health treatments. In addition, a lecture titled, “Planetary Health: Existential Threats and Clinical Opportunities,” addressed the disproportionate effects of pollution on lower-income countries.</i></p>	

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

11. Does your <u>medical school</u> curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>Score explanation: The effect of industry-related environmental toxins on reproductive health is not explored by Creighton SOM.</i></p>	

12. Does your <u>medical school</u> curriculum address important human-caused environmental threats that are relevant to the university’s surrounding community?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>Score explanation: This topic was covered in a Gold Track Lecture titled “Academic Service Learning.” The lecturer emphasized that Omaha’s high caseload of children presenting with lead poisoning was and continues to be due to The American Smelting and Refining Company, Inc. In South Omaha, there are many active factories releasing carbon monoxide in the air. We feel Creighton SOM could encourage students to research and learn more about the effect of air pollution on individuals who live in this area.</i></p>	

13. To what extent does your <u>medical school</u> emphasize the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?	
3	Indigenous knowledge and value systems are integrated throughout the medical school’s planetary health education

2	Indigenous knowledge and value systems as essential components of planetary health solutions are included briefly in the core curriculum.
1	Indigenous knowledge and value systems as essential components of planetary health solutions are included in elective coursework.
0	This topic was not covered.
<i>Score explanation: Creighton SOM does not cover this topic.</i>	

14. Does your <u>medical school</u> curriculum address the outsized impact of anthropogenic environmental toxins on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, Indigenous populations, and older adults?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<i>Score explanation: A lecture titled “Academic Service Learning” covered the effects of lead and other toxic chemicals historically released by The American Smelting and Refining Company, Inc and how this remains a justice issue that disproportionately affects children, immigrants, communities of color, and those with low SES based on proximity to where the factories operated. Another lecture, “Planetary Health: Existential Threats and Clinical Opportunities,” addressed the disproportionate effects of pollution on lower-income countries. This question was addressed in two Gold Track Lectures and could be incorporated in greater depth across the various curricular tracks.</i>	

Curriculum: Sustainability

15. Does your <u>medical school</u> curriculum address the environmental and health co-benefits of a plant-based diet?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<i>Score explanation: In the lecture “Nutrition for Medical Students,” the presenter highlighted the benefit of a plant-based diet on the human body. However, they did not relate the plant-based diet with environmental benefits.</i>	

16. Does your <u>medical school</u> curriculum address the carbon footprint of healthcare systems?	
3	This topic was explored in depth by the core curriculum

2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>Score explanation: A particular Gold Track lecture discussed waste generated by hospitals and the idea of the circular economy. It emphasized the goals of preservation of natural capital and optimization of resources through reuse and recycling. It also touched on ensuring effective design of the health system in order to limit pollution, greenhouse gas emissions, and toxic materials. Additionally, another lecture entitled “Sustainability in Laboratory Practice” was given to the SOM graduate IDC601 cohort, but this is focused on ways to reduce energy consumption and materials in a research lab without emphasis on how to do this in a hospital or clinic setting.</i></p>	

17. Does your <u>medical school</u> curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (points for each)	
2	The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment
2	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 fulfill this metric.
1	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	Environmental impact of surgical healthcare on planetary health and the climate crisis, and how can it be mitigated
1	The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anesthesia environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions
1	The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers.
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)
<p><i>Score explanation: Creighton curriculum does not cover these aspects. While the Gold Track lecture emphasized the amount of waste that the healthcare system creates, few resources or strategies are given to mitigate this waste production. Creighton SOM curriculum does not address the pharmaceutical effect on climate change nor give avenues to mitigate this. While social prescribing is vital to our knowledge base as physicians, Creighton does not emphasize this in lecture, and it is not evident in students’ experiences on clinic rotations.</i></p>	

Curriculum: Clinical Applications

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?	
2	Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum.
1	Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework.
0	No, there are not strategies introduced for having conversations with patients about climate change
<i>Score explanation: Creighton SOM does not introduce strategies to have conversations with patients about the health effects of climate change.</i>	

19. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies for taking an environmental history or exposure history?	
2	Yes, the core curriculum includes strategies for taking an environmental history.
1	Only elective coursework includes strategies for taking an environmental history.
0	No, the curriculum does not include strategies for taking an environmental history.
<i>Score explanation: Score explanation: During Pulmonology, we are given tools to take a thorough occupational and household exposure social history and how this relates to increased risk for certain diseases – for example, how asbestos and silicone can impair alveolar macrophage function. We are also taught to take a detailed social history during our Clinical Skills Experiences, including occupational history and smoking history. We recommend expanding these lessons to include exposures to air pollution and vector-borne diseases.</i>	

Curriculum: Administrative Support for Planetary Health

20. Is your <u>medical school</u> currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?	
4	Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education.
2	Yes, the medical school is currently in the process of making minor improvements to ESH/planetary health education.
0	No, there are no improvements to planetary health education in progress.
<i>Score explanation: Creighton University School of Medicine has a task force composed of faculty/staff as well as a subset of students whose primary focus is on integrating Education for Sustainable Healthcare/planetary health education into the curriculum. Students have continued to add planetary health content in CBLs/TBLs for M1s and M2s, and the faculty/staff along with the Kingfisher Institute are working on inviting speakers who have done notable work in ESH/planetary health to speak during</i>	

Grand Rounds in the 2023-2024 academic year. The students have compiled a list of potential speakers and it has been sent to the Kingfisher Institute for review. There are efforts looking into creating an elective for M4s and suggestions for ways to incorporate ESH/planetary health in M3 clinical rotations as well. However, many of these improvements have been gradual and interest from the school outside of the task force is minimal. Instructors have expressed interest and willingness to help with these ideas, but ultimately there has been a lack of initiative and leadership to implement these changes.

21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core curriculum?

6	Planetary health/ESH topics are well integrated into the core medical school curriculum.
4	Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum.
2	Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s) .
0	There is minimal/no education for sustainable healthcare.

Score explanation: At Creighton SOM, Planetary Health is covered in first and second year. These are standalone lectures as part of the Humanities track. The presence of Planetary Health in the organ system blocks is almost non-existent. To increase Planetary Health Education, it would be beneficial to relate how each organ system is affected by the environment.

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?

1	Yes, the medical school has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare
0	No, the medical school does not have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare.

Score explanation: The SOM's Planetary Health and Sustainability Task Force is responsible for curricular integration of planetary health and sustainable healthcare.

Section Total (31 out of 72)	43.06%
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Are there additional curriculum resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Interdisciplinary Research

Section Overview: *This section evaluates the quality and quantity of interdisciplinary planetary health research at the medical school and 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, medical schools 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 emphasized.*

1. Are there researchers engaged in planetary health research and healthcare sustainability research at your <u>medical school</u>?	
3	Yes, there are faculty members at the medical school who have a primary research focus in planetary health or healthcare sustainability.
2	Yes, there are individual faculty members at the medical school who are conducting research related to planetary health or healthcare sustainability, but it is not their primary research focus.
1	There are planetary health and/or healthcare sustainability researchers at the institution , but none associated with the medical school.
0	No, there are no planetary health and/or healthcare sustainability researchers at the institution or medical school at this time.
<p><i>Score explanation: Creighton's Master's of Public Health program moved to the School of Medicine in January of 2022. There is at least one faculty member for the MPH program who researches environmental health, specifically climate and natural disasters and their ecological impact on human health. Additional sustainability and health research takes place across the university. However, there are no research efforts dedicated specifically to Planetary Health or healthcare sustainability among MD faculty. We recommend that the SOM identifies faculty who are willing to conduct and/or mentor MD students in Planetary Health research.</i></p>	

2. Is there a dedicated department or institute for interdisciplinary planetary health research at your <u>institution</u>?	
3	There is at least one dedicated department or institute for interdisciplinary planetary health research.
2	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.
1	There is an Occupational and Environmental Health department , but no interdisciplinary department or institute for planetary health research.
0	There is no dedicated department or institute.
<p><i>Score explanation: The Masters of Public Health program within the Creighton School of Medicine offers opportunities to work with a faculty member who researches environmental health. However,</i></p>	

there is no established organization that streamlines students' access to interdisciplinary planetary health research.

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 medical school?

3	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.
2	Yes, there is a process in which community members impacted by climate and environmental injustice advise the climate + environmental research agenda.
1	No , but there are current efforts to establish a process for community members to advise or make decisions on the research agenda.
0	There is no process, and no efforts to create such a process.

Score explanation: Current efforts in the School of Medicine to develop a new strategic plan include discussions about promoting health equity in the community through engagement, advocacy, research, and environmental sustainability

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

3	There is an easy-to-use, adequately comprehensive website that centralizes 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.
2	There is a website that attempts to centralize various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive.
1	The institution has an Office of Sustainability website that includes some resources related to health and the environment.
0	There is no website.

Score explanation: Creighton University has a [sustainability webpage](#) that centralizes campus sustainability efforts, including the Sustainable Creighton Initiative, a pledge to follow the doctrines laid out in "Our Common Future," grant opportunities for students, volunteer engagement opportunities for students, and undergraduate academic programs. The campus-wide website does not list research efforts across the university. Additionally, the website does not specifically emphasize health as it relates to the environment, but it addresses topics relevant to health. We recommend listing research efforts under the "Academic" tab and adding "Health" as a guiding principle for the Office of Sustainability.

5. Has your institution recently hosted a conference or symposium on topics related to planetary

health?	
4	Yes, the medical school has hosted at least one conference or symposium on topics related to planetary health in the past year.
3	Yes, the institution has hosted at least one conference or symposium on topics related to planetary health in the past year.
2	Yes, the institution has hosted a conference on topics related to planetary health in the past three years.
1	The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event.
0	No, the institution has not hosted a conference on topics related to planetary health in the past three years.
<p><i>Score explanation: Creighton has not hosted any conferences or symposiums strictly dedicated to planetary health. However, Creighton's annual Global Health Conference Midwest includes speakers focused on planetary health. In 2023, the conference included a breakout session entitled "Climate change and environmental impacts and Maternal/fetal health: Low-Resource, High-Risk Maternal Care" a panel on careers in global and public health, and a keynote on "Nested Ecosystems - Human and Wildlife Well-being." The conference is hosted in partnership by multiple schools within the University, including the School of Medicine.</i></p>	

6. Is your medical school a member of a national or international planetary health or ESH organization?	
1	Yes, the medical school is a member of a national or international planetary health or ESH organization
0	No, the medical school is not a member of such an organization
<p><i>Score explanation: In the fall of 2021, Creighton School of Medicine joined the Global Consortium on Climate and Health Education. We recommend Creighton SOM meaningfully engage in the work of this and other climate-health organizations.</i></p>	

Section Total (12 out of 17)	70.59%
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Back to summary page [here](#)

Are there additional research resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Community Outreach and Advocacy

Section Overview: This section evaluates medical school engagement in community outreach and advocacy efforts associated with planetary health. Researching and teaching planetary health is necessary but not sufficient. It is critical that institutions also directly engage with communities most affected by environmental health harms. Although climate change is a problem largely created by those with power and resources, its impacts fall disproportionately on under-resourced populations and communities of color. 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.

1. Does your medical school partner with community organizations to promote planetary and environmental health?	
3	Yes, the medical school meaningfully partners with multiple community organizations to promote planetary and environmental health.
2	Yes, the medical school meaningfully partners with one community organization to promote planetary and environmental health.
1	The institution partners with community organizations, but the medical school is not part of that partnership.
0	No, there is no such meaningful community partnership.

Score explanation: As an institution, Creighton partners with community groups and lists its sustainability-focused collaborations on the Office of Sustainability page.

Creighton runs a community orientation entitled “Climate Change: Faith, Hope, and Action” <https://www.creighton.edu/geo/sustainability/getinvolved/communitycollaborations/communityorientations> that is focused on environmental justice. This community orientation is collaboration between the Office of Sustainability, The Schlegel Center for Service and Justice, and various community partners, and it focuses on introducing attendees to environmental justice issues via a presentation, a site visit, and interactions with local leaders. This community orientation is not publicized within the School of Medicine, so we recommend that the School of Medicine partner with the orientation planners to increase medical student involvement.

The institution partners with community organizations, but the School of Medicine is not meaningfully involved in these partnerships. While students in the School of Medicine may be involved in these partnerships and in community organizations, it is not facilitated by the School of Medicine. Students in the School of Medicine regularly volunteer with Habitat for Humanity and the Completely Kids Community Garden. Both of these organizations focus on the environment, with Habitat for Humanity focusing on reusing resources and reducing waste in the community while the community garden promotes environmental stewardship and sustainability.

2. Does your medical school offer community-facing courses or events regarding planetary health?	
3	The medical school offers community-facing courses or events at least once every year.

2	The medical school offers courses or events open to the community at least once per year, but they are not primarily created for a community audience.
1	The institution has offered community-facing courses or events, but the medical school was not involved in planning those courses or events.
0	The institution/medical school have not offered such community-facing courses or events.
<p><i>Score explanation: The School of Medicine is heavily involved in the planning and execution of the Global Health Conference Midwest. This conference is open to the community for a fee of \$10-30 and features lectures related to planetary health. Creighton University also hosts the Planetary Emergency Lecture annually as a part of a public lecture series. The most recent lecture was April 12th, 2022 and was titled “Making Sense of the Spectrum of Climate Change Denial: Cultural Trauma in the Face of the Planetary Emergency”. These lectures are open to the Omaha community.</i></p>	

3. Does your <u>medical school</u> have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?	
2	Yes, all students regularly receive communication updates dedicated to planetary health and/or sustainable healthcare.
1	Yes, planetary health and/or sustainable healthcare topics are sometimes included in communication updates.
0	Students do not receive communications about planetary health or sustainable healthcare.
<p><i>Score explanation: The School of Medicine does not provide regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications. University-wide emails occasionally touch on sustainability or divestment as it relates to environmental sustainability, but they have not included mention of planetary health or sustainable healthcare in the last two years. Students may opt-in to receive emails from the Office of Sustainability or the student organization “GreenJays”, which will relate to sustainability, however these updates infrequently relate to planetary health or sustainable healthcare. Additionally, many students in the School of Medicine do not know about these emails or organizations. We recommend that students be invited to join the Office of Sustainability listserv each August.</i></p>	

4. Does the <u>institution</u> or <u>main affiliated hospital trust</u> 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?	
2	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.
1	Yes, the institution or main affiliated hospital trust offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers
0	There are no such accessible courses for post-graduate providers

Score explanation: CME credit is available for participants of the Global Health Conference Midwest. This conference is co-hosted by the School of Medicine and features lectures that relate to planetary health.

5. Does your medical school or its primary affiliated hospital have accessible educational materials for patients about environmental health exposures?

2	Yes, all affiliated hospitals have accessible educational materials for patients.
1	Some affiliated hospitals have accessible educational materials for patients.
0	No affiliated medical centers have accessible educational materials for patients.

Score explanation: One of the affiliated hospitals, the Omaha Children's Hospital and Medical Center, has physical copies of educational materials about environmental health exposures. Other primary affiliated hospitals do not have easy access to these materials. We recommend posting patient-facing materials on the websites for CHI and its clinics.

6. Does your medical school or its primary affiliated hospital have accessible educational materials for patients about climate change and health impacts?

2	Yes, all affiliated hospitals have accessible educational materials for patients.
1	Some affiliated hospitals have accessible educational materials for patients.
0	No affiliated hospitals have accessible educational materials for patients.

Score explanation: Neither the School of Medicine nor its main affiliated hospital provided easily accessible materials online and none of the physicians we reached out to were aware of any hard-copy materials at their hospital. We recommend posting materials on climate change and the health impacts for patient review on the CHI hospital and clinic websites.

Section Total (6 out of 14)	42.86%
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Back to summary page [here](#)

Are there additional community engagement and advocacy resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

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.*

1. Does your <u>medical school</u> or your <u>institution</u> offer support for medical students interested in enacting a sustainability initiative/QI project?	
2	Yes, the medical school or institution <i>either</i> offers grants for students to enact sustainability initiatives/QI projects <i>or</i> sustainability QI projects are part of the core curriculum.
1	The medical school or institution encourages sustainability QI projects (to fulfill 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.
0	No, neither the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects.

Score explanation: Creighton University created an Office of Sustainability in the fall of 2021. With this creation, the [Creighton Student Sustainability Action Fund \(CSSAF\)](#) offers grants to all University Students, including medical students, who wish to pursue sustainability initiatives and quality improvement projects. The CSSAF mission is to “contribute to building a culture of sustainability at Creighton University by enabling, supporting, and financing student-driven initiatives that collaboratively tackle interconnected environmental, social, and economic issues.”

The School of Medicine (SOM) offers an [M1 Summer Research Program](#) which provides funding for non-specific student projects, including QI initiatives. Students may submit proposals for projects of their own imagination and solicit mentors independently. In addition, the SOM provides a list of research mentors in their respective field every year - mentors who encourage the collaboration with students in creation and completion of various research projects, some of which include goals of QI initiatives.

2. Does your <u>institution</u> offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare?	
2	The institution has a specific research program or fellowship for students interested in doing planetary health/sustainable healthcare research.
1	There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these require student initiative to seek these out and carry them out in their spare time.
0	There are no opportunities for students to engage in planetary health/sustainable healthcare research.

Score explanation: The School of Medicine offers an M1 Summer Research Program that provides funding for student projects. Students may submit proposals for projects of their own imagination and solicit mentors independently. There are no Planetary Health- Focused mentors exclusively listed in our [database](#) for student research mentors. Research mentorships are categorized based on the mentors' medical specialty or field of expertise, for example Anesthesiology as a category. However despite this, mentors have encouraged students and offered guidance in pursuit of their proposed sustainability QI initiatives and research within their respective field of study. In addition, mentors have offered opportunities to students to collaborate in various research projects with goals of improving sustainable healthcare practices in their own medical specialty.

Currently, there is no specific research program or fellowship for students interested in doing planetary health or sustainable healthcare research. We recommend the medical school expand its relationship with faculty within the University's Public Health program. Thus, providing students better accessibility to those involved in research related to climate change, planetary health, or sustainable healthcare.

3. Does the medical school have a webpage where medical students can find specific information related to planetary health and/or sustainable healthcare activities and mentors within the medical school? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.

2	The medical school has a webpage with specific information related to planetary health or sustainable healthcare that includes up-to-date information on relevant initiatives and contact information of potential mentors.
1	There is a medical school webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information.
0	There is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.

Score explanation: The School of Medicine website does not have a dedicated page for information related to planetary health and sustainable healthcare projects or mentors.

4. Does your medical school have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?

2	Yes, there is a student organization with faculty support at my medical school dedicated to planetary health or sustainability in healthcare.
1	Yes, there is a student organization at my medical school dedicated to planetary health or sustainability in healthcare but it lacks faculty support .
0	No, there is not a student organization at my institution dedicated to planetary health or sustainability in healthcare.

Score explanation: The School of Medicine's Planetary Health and Sustainability Task Force created a student branch in the fall of 2021. The group allows and encourages student input in the goals of the

task force, as well as pursue projects related to planetary health and healthcare sustainability. In addition, the responsibility of the student branch is updating the Planetary Health Report Card - allowing students to assess areas of improvement. The student branch is a recognized entity within the SOM, but is not a registered student group and does not receive funding.

There are other clubs within the SOM that include focuses related to climate justice and climate and environmental related health outcomes. Some of these include Justice in Medicine, the Medical Innovation, Collaboration, and Entrepreneurship (MICE) club, and the Mayan Community Health Collaborative. Although these themes are not explicit in the mission of these groups, they have all included these topics within their programming. The funding status of these groups vary.

5. Is there a student liaison representing sustainability interests who serves on a medical school or institutional decision-making council to advocate for curriculum reform and/or sustainability best practices?

1	Yes, there is a student representative that serves on a medical school or institutional decision-making council/committee.
0	No, there is no such student representative.

Score explanation: A medical student represents the School of Medicine on the university-wide [Climate Change Task Force \(CCTF\)](#). In November 2019, the CCTF was created with the mission of assessing the university's effort for carbon neutrality and grading Creighton's climate action plan based on the Sustainability Tracking Assessment and Rating system (STARS) In addition, three medical students serve on the medical school's Planetary Health and Sustainability Task Force which focuses on curriculum reform, laboratory research, hospital operations, and community education and outreach.

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)

1	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 organize hiking, backpacking, kayaking, or other outings for students)

Score explanation:

- The [Mayan Community Health Collaborative](#) hosts presentations on traditional Mayan sustainable farming.
- Regular volunteer calls for maintaining the university campus clinic's Community Garden.
- [Completely KIDs](#) and [City Sprouts](#) regularly call for volunteers to serve in their community gardens and food insecurity initiatives
- Student Government Wellness Chairs organize hikes for students.
- The Wilderness Medicine Interest Group hosts outdoor events.
- The Medical Innovation, Collaboration, and Entrepreneurship club hosted a guest speaker to discuss Healthcare, Climate change, and Sustainability Intersectionality.

Section Total (10 out of 15)

66.67%

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Are there additional student-led initiative resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Campus Sustainability

Section Overview: *This section evaluates the support and engagement in sustainability initiatives by the medical school and/or 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 endeavor, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinizing every aspect of how our systems operate, from where we source our energy, to how we build our infrastructure, to what companies we invest in. Our medical schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimizing environmental impact.*

1. Does your medical school and/or institution have an Office of Sustainability?	
3	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 and/or medical school.
2	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 medical school and/or hospital sustainability.
1	There are no salaried sustainability staff , but there is a sustainability task force or committee
0	There are no staff members or task force responsible for overseeing campus sustainability
<p><i>Score explanation: Creighton University has an Office of Sustainability that serves the entire university including both our Phoenix and Omaha campuses. The office supports three full-time staff members including a director, project and reporting coordinator, and an assistant. There are also 2-5 student interns at any given time. There is not a specific branch or individual for graduate medical or hospital programs. Given the unique nature of sustainability within a medical school or hospital, we encourage the University to consider hiring a staff member to focus on these areas.</i></p>	

2. How ambitious is your institution/medical school plan to reduce its own carbon footprint?	
5	The institution/medical school has a written and approved plan to achieve carbon neutrality by 2030
3	The institution/medical school has a written and approved plan to achieve carbon neutrality by 2040
1	The institution/medical school has a stated goal of carbon neutrality by 2040 but has not created a plan to reach that goal or the plan is inadequate
0	The institution/medical school does not meet any of the requirements listed above
<p><i>Score explanation: Creighton University as an institution has released a Sustainable Initiative which includes carbon goals. The goal is to reduce carbon emissions by 50% by 2028 and reach neutrality by 2050. There is a reasonable action plan to achieve these goals. Although this is an</i></p>	

improvement from prior goals, neutrality by 2050 still does not meet report card criteria and we would encourage the University to recognize climate change as a timely concern and determine ways to reduce emissions sooner than 2050.

3. Do buildings/infrastructure used by the medical school for teaching (not including the hospital) utilize renewable energy?

3	Yes medical school buildings are 100% powered by renewable energy
2	Medical school buildings source >80% of energy needs from off-site and/or on-site renewable energy.
1	Medical school buildings source >20% of energy needs from off-site and/or on-site renewable energy.
0	Medical school buildings source <20% of energy needs from off-site and/or on-site renewable energy.

Score explanation: The medical school facilities have no direct renewable energy, but due to the renewable energy efforts of the Omaha Public Power District that supplies the school's energy, some off-site renewable energy is a part of Creighton's electricity portfolio (36.4%). However, because OPPD only supplies 65% of the medical school building's energy, renewable sources only contribute 24% of usage within the current medical school building. There are plans in the works to install solar panels on a new medical school building as well as relocate old panels, although the building is still under construction. This new solar array will be 75 kW and provide an estimated 4.5% of the building's energy needs.

4. Are sustainable building practices utilized for new and old buildings on the medical school campus, with design and construction of new buildings and remodeling of old buildings conforming to a published sustainability rating system or building code/guideline?

3	Yes, sustainable building practices are utilized for new buildings on the medical school campus and the majority of old buildings have been retrofitted to be more sustainable.
2	Sustainable building practices are utilized for new buildings on the medical school campus, but most old buildings have not been retrofitted .
1	Sustainable building practices are inadequately or incompletely implemented for new buildings.
0	Sustainability is not considered in the construction of new buildings.

Score explanation: The Werner building, which will house the medical school next year, is being built to comply with LEED silver standards, although it will not receive official certification. The current medical school building has not been retrofitted to conform to any sustainability rating system or guidelines.

5. Has the medical school implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?

2	Yes, the medical school 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-utilized by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default.
1	The medical school has implemented some strategies to provide environmentally-friendly transportation options, but the options are unsatisfactorily accessible or advertised.
0	The medical school has not implemented strategies to encourage and provide environmentally-friendly transportation options.
<p><i>Score explanation: The medical school and Bergan Mercy hospital both have bike racks available for students. Additionally, the medical school is located on a public bus route. Though some students live close enough to walk to campus, driving remains to be the primary mode of transportation, particularly for clinical sites. We encourage the University to work with students to determine interest in student bus passes, and to provide information about public transportation during student orientation.</i></p>	

6. Does your <u>medical school</u> have an organics recycling program (compost) and a conventional recycling program (aluminum/paper/plastic/glass)?	
2	Yes, the medical school has both compost and recycling programs accessible to students and faculty.
1	The medical school has either recycling or compost programs accessible to students and faculty, but not both.
0	There is no compost or recycling program at the medical school.
<p><i>Score explanation: Paper recycling is available in the Cardiac Center, the current education building for CUSOM. There are also conveniently located recycling drop-off bins on campus for both glass and paper. There is no compost program available at the medical school, though there is one on Creighton's larger campus. We encourage Creighton to expand this program to the new medical school building next year.</i></p>	

7. Does the <u>medical school</u> apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?	
3	Yes, the medical school has adequate sustainability requirements for food and beverages, including meat-free days or no red-meat, and is engaged in efforts to increase food and beverage sustainability.
2	There are sustainability guidelines for food and beverages, but they are insufficient or optional . The medical school is engaged in efforts to increase food and beverage sustainability.
1	There are sustainability guidelines for food and beverages, but they are insufficient or optional . The medical school is not engaged in efforts to increase food and beverage sustainability.
0	There are no sustainability guidelines for food and beverages.

There is no evidence of sustainability guidelines for food and beverages on campus. Food for most medical school activities is procured through outside caterers; there are no medical-school-associated cafeterias.

8. Does the medical school or institution apply sustainability criteria when making decisions about supply procurement?

3	Yes, the medical school has adequate sustainability requirements for supply procurement and is engaged in efforts to increase sustainability of procurement.
2	There are sustainability guidelines for supply procurement, but they are insufficient or optional . The medical school is engaged in efforts to increase sustainability of procurement.
1	There are sustainability guidelines for supply procurement, but they are insufficient or optional . The medical school is not engaged in efforts to increase sustainability of procurement.
0	There are no sustainability guidelines for supply procurement.

Score explanation: Creighton does have [sustainability procurement guidelines](#), however, sustainable options are chosen when “quality, function and cost are equal or superior” or when deemed practical. The University has also published a [study on green purchasing](#) during the academic year of 2014-2015, in conjunction with the U.S. Environmental Protection Agency (EPA) and UNO’s Nebraska Business Development Center which outlines data on current sustainable purchasing and makes recommendations. We encourage the University to utilize these recommendations to strengthen policy on purchasing.

9. Are there sustainability requirements or guidelines for events hosted at the medical school?

2	Every event hosted at the medical school must abide by sustainability criteria.
1	The medical school strongly recommends or incentivizes sustainability measures, but they are not required .
0	There are no sustainability guidelines for medical school events.

Score explanation: There are currently no guidelines for medical school events. We recommend that the student government implement requirements, specifically for composting.

10. Does your medical school have programs and initiatives to assist with making lab spaces more environmentally sustainable?

2	Yes, the medical school has programs and initiatives to assist with making lab spaces more environmentally sustainable.
1	There are guidelines on how to make lab spaces more environmentally sustainable, but not programs or initiatives.
0	There are no efforts at the medical school to make lab spaces more sustainable.

Score explanation: Creighton has a School of Medicine Planetary Health Task Force with a sub-committee focused on making lab spaces more sustainable. The subcommittee is a relatively new entity and although there are no current guidelines, there are efforts to create energy saving initiatives and ways to reduce lab waste through shared purchasing and sharing of materials. We recommend continued efforts from this group and publishable guidelines for all campus labs.

11. Does your institution's endowment portfolio investments include fossil-fuel companies?

4	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.
3	The institution is entirely divested from fossil fuels.
2	The institution has partially divested from fossil fuel companies or has made a commitment to fully divest , but currently still has fossil fuel investments.
1	The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organized advocacy for divestment.
0	Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.

Score explanation: In a [message to campus](#) December 31, 2020, President Hendrickson announced that Creighton has committed to “exit from its holdings in private fossil fuel investments within the next 10 years.” We recommend that Creighton publish an updated divestment goal with a more clearly defined timeline.

Section Total (12 out of 32)

37.5%

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Are there additional sustainability resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

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%

Planetary Health Grades for the Creighton School of Medicine, Omaha Campus

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(31/72) \times 100 = 43.06\%$	C-
Interdisciplinary Research (17.5%)	$(12/17) \times 100 = 70.59\%$	B
Community Outreach and Advocacy (17.5%)	$(6/14) \times 100 = 42.86\%$	C-
Support for Student-led Planetary Health Initiatives (17.5%)	$(10/15) \times 100 = 66.67\%$	B
Campus Sustainability (17.5%)	$(12/32) \times 100 = 37.5\%$	D+
Institutional Grade	$((43.06 \times 0.3 + 70.59 \times 0.175 + 42.86 \times 0.175 + 66.67 \times 0.175 + 37.5 \times 0.175) = 51.00\%$	C

Report Card Trends

Section Overview

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

PHRC Trends for Creighton University School of Medicine

