



Planetary Health Report Card (Medicine): *University of Saskatchewan*



2024-2025 Contributing Team:

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Land acknowledgment: We acknowledge we are on Treaty 4 and Treaty 6 Territories and the Homeland of the Métis. We pay our respect to the First Nations and Métis ancestors of this land and reaffirm our relationship with one another.

Summary of Findings

Overall Grade	B
Curriculum	B
<ul style="list-style-type: none"> The University of Saskatchewan College of Medicine retains its score from last year with very few significant changes from last year's PHRC. Changes include the implementation of an integrative medicine elective for clerkship students, and additional teachings regarding the environmental impact of anesthetic gases and surgical medicine. Significant areas where the U of S are lacking include the impact of environmental change on indigenous populations being taught within the curriculum, as well as specific instruction on how to communicate the impact of climate change on health to patients Recommendations for future years include putting more emphasis on the integration of environmental and planetary health concepts into the medicine curriculum. This should include both pre-clerkship lecture as well as clinical skills sessions. The U of S also does not currently have staff focused on the implementation of planetary health education, and the inclusion of this may help to support these previously mentioned deficits. 	
Interdisciplinary Research	A-
<ul style="list-style-type: none"> The University of Saskatchewan's score is largely unchanged from previous years, and they continue to score well within the category of research. They continue to be home to two departments concerning environmental sciences, 2 annual sustainability research symposiums, and provides a hub for CASCADES, along with specific sustainability research projects. Recommendations remain the same from previous years, where although there is significant research being done on the topics of sustainability, there is still not a dedicated team associated with these projects. 	
Community Outreach and Advocacy	C
<ul style="list-style-type: none"> The U of S has seen no change within the Community Outreach and Advocacy section of the PHRC from previous years. There is still very limited community outreach related to planetary health, and very little formal partnership with community organizations. Communication updates for students and associates of the university continue to provide information regarding environmental developments for the university. The College of Medicine also continues to host the CASCADES learning activity related to health care sustainability, and will continue to do so as of the time of writing. Recommendations for the future include continuing to work on building connections and relations to community organizations related to planetary health and sustainability, as well as working to provide resources and guidance related to these topics to community members and students. 	
Support for Student-Led Initiatives	A
<ul style="list-style-type: none"> The university of Saskatchewan continues to excel in providing support to student initiatives related to planetary health and sustainability. They continue to be receptive to feedback and actively work with students to make active changes to the curriculum and college to provide improved education on sustainability. They also actively encourage students to create content and work with students to implement said content within the medical education. While we continue to do well in support of these initiatives, the U of S still does not have a hub for planetary health content such as a dedicated website or staff who can provide guidance and dedicated instruction on sustainability and environmental concepts. 	

Campus Sustainability

C-

- The University of Saskatchewan has made significant progress in improving campus sustainability. Improvements include plans to divest fully from fossil fuel companies and implementing sustainability criteria for food and beverage containers. These are welcome changes and while not rigorous in their approach they do make for an improvement in the university's sustainability portfolio from previous years.
- Recommendations remain largely the same in the College of Medicine working towards becoming a leader in sustainability. Recommendations for this can include access to recycling programs within the college, adopting guidelines and providing resources regarding lab sustainability, as well as within college areas. As well as potentially designating a staff member to be dedicated to further improving sustainability initiatives.

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 schools’ 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, 4) community outreach centred on environmental health impacts, and 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 (Metric #19 in Curriculum Section):** This is a series of questions students are taught to ask during medical encounters that elicits patients’ exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mould after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution. Please be as specific as possible when providing evidence for this metric.
- **Elective:** The word “elective” refers to an optional course or lecture series that a student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- **Core Curriculum:** This refers to taught material that is 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.
- **Extractivism:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to the historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.
- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.
- **Low socioeconomic status (SES):** An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.
- **Low and Middle-Income Countries (LMIC):** Countries that have lower degrees of economic affluence.
- **Anthropogenic:** Created through human activity
- **Marginalized communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).

Other considerations:

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

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

Planetary Health Curriculum

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

Curriculum: General

1.1. Did your <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?	
Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year. (3 points)	
Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year. (2 points)	
The medical school does not have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a lecture on planetary health. (1 points)	
No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. (0 points)	
Score Assigned:	3
<p><i>Score Explanation: University of Saskatchewan offers one 2 week Environmental Medicine elective to third and fourth year students. This elective course enables medical students to explore environmental health, enhancing their knowledge and skills to address related issues in clinical care and public health. It covers core principles, emerging issues, and the student's role in addressing them.</i></p> <p><i>University of Saskatchewan also offers one 2 week elective in Integrative Medicine to third and fourth year students. This elective requires students to complete the CME online course "Environmental Health: An Integrative Approach" that is available through the University of Arizona Center for Integrative Medicine. One of the objectives of this elective is "Obtain an expanded patient centered history to identify potentially modifiable lifestyle, dietary and environmental risk factors"</i></p>	

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: University of Saskatchewan offers a lecture on “Climate Change and Human Health: Impacts of Extreme Heat” in the foundations component of the year 2 curriculum. This lecture explores in depth the health impacts of extreme heat events and their relationship to climate change.

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: University of Saskatchewan offers a lecture on “Environmental Health and Climate Change” as part of the year 1 Health Promotion core curriculum. This lecture includes several slides that cover the impacts of extreme weather events on human health and the health care system.

In the Respiratory module of the core curriculum, the University of Saskatchewan offers a testable lecture titled “Changing Climate and Respiratory Diseases” that covers the impact of extreme weather on respiratory health and advocates for a sustainable healthcare system.

As mentioned in 1.2, University of Saskatchewan also offers a testable lecture on “Climate Change and Human Health: Impacts of Extreme Heat” in the foundations component of the year 2 curriculum.

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: In the Health Promotion unit of the M1 core curriculum, a lecture titled "Environmental Health and Climate Change" includes one testable learning objective. This lecture briefly addresses the changing patterns of infectious diseases on a single slide, framed within the context of social determinants of health.

In the Respiratory unit of the M1 core curriculum, a lecture titled "Respiratory: Changing Climate and Respiratory Diseases" contains one slide discussing how extreme weather events may contribute to the increased transmission of infectious diseases. The topic is also briefly mentioned in the lecture on extreme heat events.

There is also a brief mention of the impact of climate change on changing patterns of infectious disease in the "Climate Change and Human Health: Impacts of Extreme Heat" lecture in the foundations component of the year 2 curriculum.

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.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

3

Score explanation: In the Respiratory unit of the M1 core foundations curriculum, the lecture titled "Respiratory: Changing Climate and Respiratory Diseases" includes several slides addressing ambient air pollutants, deteriorating air quality, and their impact on respiratory health.

Another lecture within this unit, titled "Integrative Approach to Lung Health," briefly highlights air pollution as both a risk factor for asthma and a contributing factor to the rising global prevalence of asthma.

There is also a single slide in the "Climate Change and Human Health: Impacts of Extreme Heat" lecture that addresses the respiratory health effects of climate change and air pollution.

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.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

2

Score explanation: There is a single slide in the “Climate Change and Human Health: Impacts of Extreme Heat” lecture that addresses the cardiovascular health effects of climate change and extreme heat events.

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.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

2

Score explanation:

There are a couple slides in the “Climate Change and Human Health: Impacts of Extreme Heat” lecture that addresses the mental health effects of climate change and extreme heat events. This lecture also discussed the impact of extreme heat on neurological conditions such as dementia and psychiatric conditions like schizophrenia.

In the Health Promotion unit of the Foundations of Clinical Medicine I course (MEDC 143), a lecture titled “Environmental Health and Climate Change” briefly addressed mental health illnesses as an outcome of climate change. It also touched on the mental health effects of displacement and evacuation caused by the Canadian wildfires in the summer of 2023. In addition to the lecture, a pdf document titled “Extreme Weather and Climate Change: Population Health and Health System Implications” was provided to students that provides a more in-depth understanding of this effect.

However, the effects of environmental degradation and climate change were not explored within the Mental Health modules of the Foundations of Clinical Medicine III course (MEDC 236).

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.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

3

Score explanation: Within the Medicine and Society IV course there is a lecture titled "Environmental Health" that covers the relationships between environment and health. The lecture covers the impacts of climate change on Rural and Urban communities, including aspects such as food & water security, air pollution, and recent information on climate change deterrents being implored currently. A similar lecture is offered in the Foundations of Clinical Medicine course II which also covers climate change impacts on health.

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

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

2

Score explanation: Within the Medicine and Society IV course there is a lecture titled "Environmental Health" that contains information regarding the impact of climate change on marginalized populations. Multiple slides within the lecture refer to the additional negative impacts that climate change will have on those with low SES, unhoused populations, and indigenous communities. References to these impacts were brief, and were made in relation to larger lecture topics instead of any dedicated points being made regarding marginalized populations.

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

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

2

Score explanation: Within the Medicine and Society IV course there is a lecture titled "Environmental Health" Which contains brief mentions of the global impacts of climate change. No formal example of unequal health impacts within any area aside from Canada are mentioned.

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

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

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

2

Score explanation: Within the Medicine and Society II and III courses there is a lecture titled "Environmental Health". Score explanation: There are several slides in the "Female Infertility" lecture of the reproductive module that cover this topic briefly. It discusses the negative impacts of poor air quality and endocrine-disrupting chemicals like PCBs on female fertility. In the Respiratory module, the "climate change and respiratory disease" lecture mentioned that sulfur dioxide may be linked to reduced fertility.

1.12. Does your medical school curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

2

Score explanation: Insert explanation here. In the Changing Climate and Respiratory Diseases lecture, Saskatchewan's contribution to CO2 emissions are discussed. The extreme heat events and climate change lecture also briefly touches on the impact of extreme heat events in Saskatchewan.
- There are very few other local examples listed throughout the pre-clerkship and clerkship curriculum.
- Students have the ability to explore this option further if they choose to take the Environmental Health Elective in their fourth year.

1.13. To what extent does your medical school emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

1

Score explanation: The College of Medicine at the University of Saskatchewan offers an optional certificate for students called Making the Links - A Global Health Certificate. For this course, students are required to participate in CHEP 402 - Global Health I and CHEP 411 - Rural/Indigenous community practicum. These courses provide students with the opportunity to learn about indigenous history. Students have the opportunity to explore the significance of planetary health and sustainability in Indigenous cultures if that is something of interest to them. In addition, students can choose to pursue an elective that focuses on Indigenous health. Through this elective, students have the opportunity to learn about indigenous knowledge and value systems. Although this is not the focus of the elective, this may be something that students may choose to explore.

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.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

3

Score explanation: Score explanation: In the Changing Climate and Respiratory Diseases lecture that is offered during the respiratory module of the foundations course, the topic of worsening air quality as a result of anthropogenic environmental toxins like ozone, nitrogen dioxide, sulfur dioxide, traffic related pollution, and particulate matter are discussed particularly in the context of how they affect the respiratory system of various groups of individuals. It specifically talks about increased hospitalisation and death among the elderly and children. Furthermore, it described how city-dwellers, particularly low-income families, are especially vulnerable to extreme heat due to the “heat island” effect. In the same lecture, a slide is dedicated to identifying vulnerable subgroups.

- One of the objectives in the Integrative Approach to Lung Health lecture which is offered during the same module is “discuss the underlying factors that may be contributing to the rise in asthma prevalence.” Under this objective, it was discussed that the following marginalised groups were at increased risk of asthma: First Nations, Inuit, Metis, people of colour. In this same lecture, one of the causes for increased asthma prevalence was listed as air pollution.*
- In the Integrative Approach to Common Dermatologic Conditions, the rise of atopic dermatitis in children due to excessive exposure to airborne pollution is also discussed.*
- A lecture on the topic of extreme heat events and climate change has also been introduced for the 2023-2024 academic year. This lecture talks on vulnerable populations susceptible to heatstroke and the role that AC as a heat mitigator plays in increasing air pollutants. Furthermore, the lecture recognizes that the increase in environmental toxins contributes to worsening respiratory illnesses. The lecture also briefly touches on the impact of increasing forest fires on respiratory health. Lastly, the college of medicine does offer an Indigenous Health elective and an Environmental Health elective that may touch on these topics.*

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.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

2

Score explanation: The University of Saskatchewan College of Medicine teaches students about the health benefits of various types of diets, including plant-based, across multiple modules in year one and two. However, when teaching about plant-based diets, the College of Medicine briefly addresses the environmental benefits in the core curriculum. The College of Medicine provided students with a Healthy Eating video in the self-study session, Macronutrients and Healthy Eating, within the Health Promotion section of Foundations I. This video briefly addresses the environmental benefits of plant-based diets. In addition to this video, the College also provided an additional resource, BBC's "Follow the Food" series which more explicitly addresses climate and environmental impact.

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

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

2

Score explanation: At the University of Saskatchewan College of Medicine, the carbon footprint of healthcare systems is addressed in several lectures. In the Changing Climate and Respiratory Diseases lecture, the carbon footprint of various types of inhalers was discussed. This lecture also emphasises actions to decrease inhaler related emissions. Furthermore, the College of Medicine provided an article by Ebie et al. titled "Extreme Weather and Climate Change: Population Health and Health System Implications." This article discusses the carbon footprint of healthcare systems. Moreover, the College supports student-led groups, elective lunch talks, and research opportunities that address topics like this one. The University of Saskatchewan College of Medicine hosted a local hub in 2023 of the Summer Institute on Healthcare Sustainability. This is an interdisciplinary one-week learning activity with CASCADES as the national host. Last year there were facilitators and participants from public health, medicine, pharmacy, Saskatchewan Health Authority staff, and psychology. University of Saskatchewan will host a hub again in June 2024.

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)	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 fulfil this metric. (2 points) .	0
The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK. (1 point)	2
Environmental impact of surgical healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	0
The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anaesthesia's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)	0
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
<p><i>Score explanation: Medicine and Society III & IV have lectures dedicated to stewardship and environmental challenges posed to the healthcare system. These lectures incorporate graphics and data related to over-investigation, treatments, and medicalization in healthcare. Additionally, information regarding waste production and more detailed concepts such as the impact of inhalers in regards to carbon footprints are talked about briefly within these lectures.</i></p> <p><i>Non-pharmaceutical management is emphasized as a treatment option across multiple foundation lectures within the curriculum. However, this coverage is often related solely to the pathology being discussed and not within an environmental context.</i></p>	

Curriculum: Clinical Applications

1.18. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies to have conversations with patients about the health effects of climate change?	
Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum. (2 points)	
Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework. (1 points)	
No, there are no strategies introduced for having conversations with patients about climate change. (0 points)	
Score Assigned:	0
<i>Score explanation: The University of Saskatchewan currently does not currently have lectures or dedicated teachings on having conversations with patients about climate change. Topics exploring environmental effects on health come up throughout the program, but these topics do not provide education on how to incorporate this information within a clinical practice context.</i>	

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
<i>Score explanation: Within the Foundations of Clinical Medicine II course respiratory module there are multiple instances in which the importance of asking for environmental exposures is to a history. The clinical skills component of the curriculum also provides guidance on when environmental-based history topics are relevant to a patient context, such as with respiratory or traumatic presentations..</i>	

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:	2
<i>Score explanation:</i> The University of Saskatchewan has maintained a number of improvements from the preceding year. This includes our implementation of the CASCADES Summer Institute for Sustainability which began in the summer of 2023, and continuous improvements to planetary health-based lectures within the medicine curriculum. While these programs and events continue to be supported at the U of S there is currently no information indicating any brand new developments for this year.	

1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> 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
<i>Score explanation:</i> The University of Saskatchewan has been increasing planetary health education throughout the medicine curriculum. Several environmental topics, including occupational exposures, health effects of climate change, and identifying climate-related healthcare flags, are available in pre-clerkship and clerkship. The implementation of new lectures across different stages has served to increase longitudinal integration. Additionally, there is an environmental health elective available to those who are interested during their fourth year of training.	

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:

0

Score explanation: There is no designated faculty or staff within the college of medicine that is responsible for planetary health content or sustainability in healthcare.

Section Total (51 out of 72)

71%

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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 <u>institution</u>?	
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:	2
<i>Score explanation: Score explanation: The College of Medicine at the University of Saskatchewan supports 19 researchers focused on topics related to sustainability and healthcare. These researchers are listed on the Sustainability Research Inventory page of the Office of Sustainability website which has a comprehensive inventory of researchers across the university who focus on sustainability. However, none of the 19 researchers are primarily focused on planetary health related topics as their main research interest.</i>	

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 points)

There is **no** dedicated department or institute. (0 points)

Score Assigned:

3

Score explanation: Score explanation: The University of Saskatchewan is home to two interdisciplinary planetary health focused departments including the [Global Institute for Water Security \(GIWS\)](#) and the [School of Environment and Sustainability](#). The GIWS works to protect Canada's freshwater resources, mitigate the risk of water related natural disasters, forecast extremes of global change, as well as co-create knowledge with Indigenous communities. The Institute also hosts the [Living Skies Postdoctoral Fellows \(PDF\) program](#) which specifically works to foster interdisciplinary research within the GIWS. The School of Environment and Sustainability hosts graduate programs in Water Security, Regenerative Sustainability, Energy Security, Chemical Risk Assessment, and Environment and Sustainability. The department supports [research](#) across many of the fields of planetary health and is focused on addressing the United Nations 2030 Sustainable Development Goals.

Furthermore, the University of Saskatchewan [Signature Areas of Research](#) are largely focused on planetary health issues with researchers across departments working on these issues. Finally, the [Office of Sustainability](#) serves as a central coordination system for suitability related work throughout the university.

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

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

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

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

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

Score Assigned:

2

Score explanation: [Communities and Sustainability](#) is one of the Signature Areas of Research at the University of Saskatchewan, which promotes research conducted with collaboration with community members. Researchers at the University of Saskatchewan have the option to [partner with UNESCO](#) and complete community-based research with community participation and action. The group also encourages knowledge exchange between communities, university groups, and researchers.

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: University of Saskatchewan's [Office of Sustainability](#) showcases an easy to use website that provides information regarding sustainability programs and events, opportunities for student involvement, campus footprint reports, an inventory of researchers who focus on sustainability-related topics, and appropriate resources.

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:

4

Score explanation: This year the Western College of Veterinary Medicine at the University of Saskatchewan hosted the institution's first [One Health Symposium](#) in November 2024. The symposium focused on combining expertise and resources regarding human and veterinary medicine, environmental sciences and agriculture to attend to global health threats. The symposium also allowed students to connect with those involved in One Health research and showcased the research in this area.

Additionally, the University of Saskatchewan College of Medicine division of social accountability hosted a hub for the annual Summer Institute for Sustainability in partnership with [CASCADES](#) (Creating a Sustainable Canadian Health System in a Climate Crisis) in June, 2024. The institute aimed to increase awareness of sustainable health systems and current sustainability research across Canada as well as build a professional network of interdisciplinary researchers, clinicians, and trainees.

Finally, the School of Environment and Sustainability hosts two annual symposiums: The [Summer Professional Symposium](#), where students present their research related to their studies in energy and water security, sustainability, and other topics related to planetary health.

2.6. Is your institution a member of a national or international planetary health or ESH/ESV organisation?

Yes, the institution is a member of a national or international planetary health **or** ESH/ESV organisation. (1 points)

No, the institution is **not** a member of such an organisation. (0 points)

Score Assigned:

0

Score explanation: The University of Saskatchewan's College of Medicine (CoM) is not currently a member of a national or international planetary health or ESH/ESV organization. However, the CoM is partnering with [CASCADES](#) to offer an in-person hub in Saskatoon for the Summer Institute for Sustainability.

Additionally, researchers at the University of Saskatchewan have partnered with [UNESCO](#) to work with communities (both local and international) and indigenous people in the areas of environmental stewardship and governance, community-engaged research practices, Indigenous food systems, and gender and youth in environmental management.

Section Total (14 out of 17)

82.4%

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Community Outreach and Advocacy

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

3.1. Does your <u>institution</u> 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:	1
<p><i>Score explanation: There is currently some community funding to promote environmental and planetary health, but the College of Medicine is not directly involved in community organization partnerships. The University of Saskatchewan created a Community Reciprocity Fund to offer financial funding up to \$2,500 for community-located partners. Recipients include the Saskatoon Food Bank Garden Patch and Child Hunger Education Program (CHEP) Mobile Market. However, there are no direct partnerships with community organizations or direct opportunities for students to participate in local planetary health and environmental health initiatives.</i></p>	

3.2. Does your institution offer community-facing courses or events regarding planetary health?

The **institution** offers community-facing courses or events at least once every year. (3 points)

The **institution** offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points)

The **institution** has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point)

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

Score Assigned:

1

Score explanation: The University of Saskatchewan has hosted some community facing courses and events, but the College of Medicine was not involved in the planning of these events. For example, in March 2024, the University of Saskatchewan the Office of Sustainability hosted a week of events to celebrate the United Nations ' Sustainable Development Goals and Open Education with a series of panels, workshops, professional development sessions, and other events. This was widely advertised to the public.

In February 2025, the University of Saskatchewan also hosted a TEDx event that was open to the community. It had two sessions touching on sustainability, including a session from Dr. Vishnu Acharya speaking about converting food-waste into bioenergy and biomaterials and Dr. Kerry McPhedran speaking about reusing municipal wastewater to solve urban water shortages. Although the entire TEDx event was not focused on sustainability, it had elements that touched on the topic.

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

Yes, all students **regularly** receive communication updates dedicated to planetary health and/or sustainable healthcare. (2 points)

Yes, planetary health and/or sustainable healthcare topics are regularly included in communication updates to **some courses**. (1 point)

Students **do not** receive communications about planetary health or sustainable healthcare. (0 points)

Score Assigned:

1

Score explanation: The College of Medicine digitally publishes weekly newsletters called "E-News for the College of Medicine" which sometimes provide information related to planetary health or sustainable healthcare. For example, a January 2024 newsletter highlighted a glove recycling program at Saskatoon City Hospital as a solution to reduce healthcare's carbon footprint and a March 2024 newsletter advertised a CASCADES Summer Institute on Sustainable Health Systems as an opportunity for learners to increase their understanding of sustainable health systems and current action in Canada. Other than these occasional communication updates, students do not regularly receive communication updates dedicated to planetary health or sustainable healthcare.

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:

0

Score explanation: The College of Medicine has a Continuing Medical Education initiative. However, no references were found to any CME resources or courses relating to planetary health and sustainable healthcare. Similarly, the Saskatchewan Health Authority (SHA) does not have any resources for continued education relating to planetary health and sustainable healthcare itself.

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 hospitals have accessible educational materials for patients. (0 points)

Score Assigned:

2

Score explanation: The Saskatchewan Health Authority (SHA) manages all U of S College of Medicine associated hospitals and operates an [electronic resources library](#) with health information for patients. The SHA operates the "[Environmental Health](#)" website which is a Healthline Outline content page created by Healthwise and was most recently updated October 24, 2024. This page details information on topics such as Environmental Illness, Lead Poisoning, Carbon Monoxide Poisoning, and Radon. However, locating these resources through the SHA website's search function can be difficult. Users must search for specific terms like "Radon" to locate relevant pages as broader terms such as "Environment" do not yield relevant results. While some educational materials are available for patients, they are not easily accessible and are not produced by the SHA directly. Additionally, the U of S College of Medicine website does not offer patient friendly educational materials related to 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:

2

Score explanation: The Saskatchewan Health Authority (SHA) manages all U of S College Medicine associated hospitals and operates an [electronic resources library](#) with health information for patients. There is no information directly on the website detailing climate change and health impacts. Relevant information could potentially be available through searching the provided resource library. However, such resources are not readily accessible for patients. The U of S College of Medicine website does not offer any patient friendly education materials related to climate change and health impacts.

Section Total (7 out of 14)

50%

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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: The Division of Social Accountability (DSA) within the College of Medicine offers \$3000 of funding per project via the Social Accountability Lab for Learning and Teaching (SALLT). Projects are student-developed and aimed towards adding to the growing body of advocacy work, community engagement and health equity principles in the realm of social accountability, including planetary health or sustainability. They also offer funding for College of Medicine student groups involved with social accountability, advocacy, and health-equity. While the funding is not specific for sustainability projects, they are included within the eligibility criteria.

The College of Medicine Division of Research also offers funding for summer research projects, of which some projects may be related to sustainability initiatives or quality improvement. Students can work with faculty to develop projects and apply for this funding.

The University of Saskatchewan's Office of Sustainability and the USSU Sustainability Committee have partnered to offer \$10 000 for student-developed sustainability projects at the University of Saskatchewan since 2016

4.2. Does your institution offer opportunities for students to do research related to planetary

health and/or sustainable healthcare/vetcare?	
The institution has a specific research program or fellowship for students interested in doing planetary health/sustainable healthcare/vetcare research. (2 points)	
There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these require student initiative to seek these out and carry them out in their spare time. (1 point)	
There are no opportunities for students to engage in planetary health/sustainable healthcare research. (0 points)	
Score Assigned:	1
<p><i>Score explanation: The College of Medicine's Office of the Vice Dean of Research offers students opportunities to become involved in various types of research, including planetary health or sustainable healthcare research. However the majority of this research is not specific to planetary health/sustainable healthcare. Faculty can post research opportunities related to planetary health or sustainability and students can apply to participate. Additionally, students can reach out to faculty interested in sustainability to create research projects and apply for funding from this division.</i></p> <p><i>The Office of Sustainability at the University of Saskatchewan has a comprehensive list of sustainability and planetary health research occurring at the university with some representation from the College of Medicine. Student initiative would be required if they wished to participate in this research.</i></p> <p><i>The University of Saskatchewan's Sustainability Education Research Institute within the College of Education offers a collaborative environment for faculty, postdoctoral fellows, graduate students, staff, and other partners conducting research on environment and sustainability in relation to education. Unfortunately, there is currently no partnership with the College of Medicine.</i></p>	

4.3. Does the institution have a web page 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 web page 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 web page 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:		1

4.3. Does the institution have a web page 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 web page 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 web page 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 explanation: The College of Medicine does not specifically have a webpage dedicated to sustainable healthcare or planetary health. The University of Saskatchewan's Office of Sustainability however, does have numerous web pages dedicated to research, workshops, and learning opportunities for students who are interested in engaging in sustainability initiatives. The College of Medicine is mentioned in some of these webpages. Additional planetary health and sustainability content can also be found throughout the Universities home page or when directly searched. The College of Medicine has a dedicated webpage to their Strategic Plan (2017-2025), in which sustainability is a principle highlighted in this initiative. Other sustainability initiatives through the College of Medicine are also often advertised through DSA platforms, My MD Blogs, or other college communication mediums.

The Planetary Health Student Group of the Student Medical Society of Saskatchewan (SMSS) has social media pages on which planetary health news and activities are shared, however they are not a formal part of the College of Medicine and are not listed specifically on the College of Medicine's website. Students must take the initiative to follow these pages in order to access the content.

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: The Student Medical Society of Saskatchewan (SMSS) has both an Environment and Sustainability Representative and a registered Planetary Health Student group aimed at increasing student engagement with planetary health concepts. Both work to create planetary health initiatives and events within the academic setting as well as outside of them. Both roles are closely intertwined and have been supported by faculty, particularly course directors and the Associate Dean for Undergraduate Medical Education. Through these roles and with the support of faculty new curriculum components have been created to enhance planetary health teaching at the undergraduate medical education level. The new curriculum was inspired by the 2022-2023 PHRC and additional teaching continues to be implemented for the benefit of the medical students' education.

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 that serves on a department or institutional decision-making council/committee. (1 points)

No, there is no such student representative. (0 points)

Score Assigned:

1

Score explanation: The Student Medical Society of Saskatchewan has an Environment and Sustainability Representative. This position involves working with various groups (Advocacy Division of the SMSS, Planetary Health Student Group, and Sustainability Officers across Canada) to promote climate change and health-related educational opportunities. The individual in this role is instrumental to furthering the College of Medicine's sustainability policies and practices as well as planetary health within the curriculum.

4.6. In the past year, has the <u>institution</u> 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
<p><i>Score explanation:</i></p> <ol style="list-style-type: none"> <i>The Office of Sustainability has an open website that lists resources for sustainable food systems including, an Edible Landscapes Food Map and College of Agriculture and Bioresources Rooftop Garden, which both support food security while promoting sustainable agriculture practices.</i> <i>Various groups host events featuring student leaders, community members, scientists and medical specialists involved in planetary health advocacy. These groups include the Planetary Health Student Group, Usask Health Sciences, and even the College of Medicine curriculum.</i> <i>The Office of Sustainability hosts an annual event, called EcoHack, aimed at creating solutions to local environmental and sustainability problems. In addition, the CASCADES Summer institute is a learning opportunity for students/professionals interested in learning from local and national leaders in planetary health and climate change.</i> <i>USask has various local artists who contribute pieces to campus or submit them to the Arts and Galleries Collection. Pieces have included "Water" a painting that highlights the interdependence of humans and ecosystems and an interactive installation that explores interconnectedness of humans, the planet, and wellbeing.</i> <i>The Environmental Sustainability Representative connects medical students with volunteer opportunities regarding planetary health. In addition, the Office of Sustainability also lists various volunteer opportunities dedicated to improving planetary health including Saskatoon Cycles, EcoFriendly Sask, and PlantForever.</i> <i>There are multiple groups across the University of Saskatchewan that promote and host outdoor activities for students including hikes and scavenger hunts.. These include groups such as the University of Saskatchewan Student Unions, Planetary Health Student Group through the SMSS, and Exercise is Medicine.</i> 	
Section Total (13 out of 15)	86.67%

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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 medical schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimising environmental impact.

5.1. Does your <u>institution</u> 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
<i>Score explanation: USask has an Office of Sustainability that serves the entire campus. This office has 3 full-time staff: a Chief Sustainability Officer, a Community Engagement Coordinator, a Reporting and Engagement Specialist. While the individual hospitals affiliated with the medical school do not have a designated staff member for sustainability, SHA has a staff member dedicated to Energy and Sustainability.</i>	

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: USask's current sustainability strategy (2021-2030) has planned for a 45% emission reduction by 2030 and a net-zero goal by 2050. These goals are intended to be met by the following commitments: Decarbonization and Demand Reduction, Build Better, Sustainability Revolving Fund, Engagement Initiatives, Sustainability in IT, Share Widely Our Progress. In regard to decarbonization, a decarbonization study informed planning towards the strategy. Other examples of small-scale decarbonization projects are mentioned. For example, the Health Sciences building, which houses the College of Medicine, completed a urinal retrofit project.

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 buildings at USask are supplied by a combination of SaskPower grid electricity and natural gas, both directly and indirectly. Two solar PV arrays exist on campus, including the John Mitchell Building and the Horticulture Department. Lighting retrofitting has been taking place for a number of years on campus, focusing on switching older bulbs to energy-efficient electronic ballasts and LEDs. USask is currently investigating options for transitioning outdoor lighting to LED equivalents and automated controllers are being added to outdoor plug-ins. The Health Science building makes use of solar collectors for its supply of domestic hot water. It also has features such as heat reclamation and occupancy sensors for lights to reduce energy usage.

5.4. Are sustainable building practices utilised for new and old buildings on the institution's campus, with design and construction of new buildings and remodelling of old buildings conforming to a published sustainability rating system or building code/guideline?

Yes, sustainable building practices are utilised for new buildings on the institution's campus and the **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)

Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have **not been retrofitted**. (2 points)

Sustainable building practices are **inadequately or incompletely** implemented for new buildings. (1 point)

Sustainability is **not considered** in the construction of new buildings. (0 points)

Score Assigned:

2

Score explanation: According to the Health Sciences' LEED Procedure and Policy, 3 of the 5 wings were built or renovated in a development period in which LEED standards were standard policy. Further, The Health Sciences Building E-Wing and D-Wing have been awarded LEED Gold status and LEED Silver status respectively. The A-Wing was renovated in accordance with LEED Gold principles.

Since 2017, the university has been conducting a campus-wide lighting retrofit intended to switch out existing lights with energy-efficient LED bulbs. However, no retrofitting projects conforming to currently established standards were identified.

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:

1

Score explanation: The medical school welcome document and orientation sessions advertise an inter-hospital shuttle between various Saskatoon hospital locations, available for student and staff use. Public transportation, including the city bus, and driving personal vehicles remains the primary mode of transportation for most students in Saskatoon. USask automatically includes a bus pass (U-pass) for Saskatoon transit within undergraduate medical student fees for the Fall and Winter semesters (September-April) to encourage utilisation, with access directly on campus. There are also on-campus parking lots in which students can enter into a lottery to purchase a parking pass, as well as pay-per-visit lots and parking metres across the campus. Most areas are within walking distance for students living in USask residence.

The latest modal share survey indicated that public transport makes up the largest share of student transportation at 49.1%. However, this was down from 52% in 2019.

At the Regina campus, city bus services and a park-and-ride shuttle are advertised to learners. This is available for students to opt-in at their own discretion.

The University of Saskatchewan advertises various other transportation options for students (e.g. biking). The U of S campus hosts some bike racks, and more secure bike lockers are available for rent (\$20/month). Additionally, medical students can make use of bike lockers for free at the hospitals.

Third and fourth-year medical students are responsible for their own transportation to clinics around Saskatoon and Regina, as well as rural placements around the province. Given tight scheduling and poorly accessible public transit, most students choose to drive personal vehicles, rather than relying on public transportation.

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:

0

Score explanation: USask has a single-stream recycling program for paper, cardboard, glass, plastic, metal, and beverage containers. There is a separate recycling program for personal batteries and electronics. Institutional batteries can be recycled at specified locations, including inside of the Health Sciences buildings.

There is a mask recycling drop-off found by the main entrance of the Health Sciences Building B-Wing as well as next to the elevator outside of the Health Sciences Supply Centre.

A campus-wide composting program contract is currently being finalized and is expected to be operational in 2025. Food waste produced on campus is tracked by USask's Grounds Management, who also compost it.

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 **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. (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: The University of Saskatchewan Culinary Services, which services the food operations at the University Campus has several sustainable food initiatives, such as its partnership with Campus Rooftop Gardens, Biodegradable Containers, and Local Purchasing. While these initiatives are prioritized at Culinary Service's own locations, it is not clear if the leasing restaurants follow similar sustainability initiatives.

RUH, the main teaching hospital affiliated with the Saskatoon Campus, is currently running a rooftop garden, which is harvested and used by the RUH kitchen. This reduces the kitchen's carbon footprint. For example, the lettuce grown in the vertical garden towers requires 95 percent less water than lettuce grown in the ground. This project is currently being studied to be expanded to other SHA facilities.

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:

1

Score explanation: The U of S Sustainability guidelines for supply procurement are optional and can be found on the university's web page. The most recent update was in April 2023 by an amendment. It should be noted that the U of S College of Medicine and Saskatchewan Health Authority are not involved in sustainable procurement.

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: The Saskatchewan Medical Student Society (SMSS) has a sustainability policy for all student-led events. The policy consists of the following:

- *Student Society groups that host > 4 sustainable events are eligible for an extra \$100 in funding as an incentive for medical student events.*
- *Event hosts must remind students to bring their own materials in the event advertisement if necessary. This helps to reduce single use cutlery and containers.*
- *All leftover food must be donated to event attendees or local organisations.*
- *Groups are encouraged to choose local and sustainable catering options.*
- *Events should be advertised as sustainable.*
- *USask also has a guide to sustainable events on campus that medical students could refer to for tips and suggestions for catering/donation locations, however this is optional and not incentivized.*

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:

0

Score explanation: The Office of Sustainability at USask oversees a Work Green Labs initiative, aimed at providing \$300 grants to invest in greener laboratory practices. Lab workers can also register to become Work Green "Champions", which is a role aimed at showing support for sustainable practices and garnering additional funding for more sustainable workplaces. Additional efforts include a Fume Hood Awareness Program, designed to raise awareness on energy efficient fume hood usage. The College of Medicine is not directly involved in these programs and initiatives. Information regarding the success of these initiatives was not publicly available.

5.11. Does your <u>institution's</u> 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		
<p><i>Score explanation: The University's Annual Sustainability Report from 2019 states that it integrates environmental, social and governance (ESG) criteria into the management of the funds. The university previously had an investment disclosure on its website detailing its investment practices. However, this document is not accessible anymore. Therefore, it can not be determined if the University is currently invested or divested from fossil-fuels companies as of 2025.</i></p> <p><i>Usask established a Sustainability Revolving Fund (SRF) in 2014 to finance sustainability initiatives at the university. This fund reinvests cost savings resulting from itself back into the fund. To date, 23 projects have been approved and over \$1.6 million have been committed. It has resulted in approximately \$536,000 in annual utility savings.</i></p>			
<table border="1"> <tr> <td>Section Total (13 out of 32)</td><td>40.6%</td></tr> </table>		Section Total (13 out of 32)	40.6%
Section Total (13 out of 32)	40.6%		

Back to Summary Page [here](#)

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 Saskatchewan School of Medicine

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(51/72) \times 100 = 71\%$	B
Interdisciplinary Research (17.5%)	$(14/17) \times 100 = 82\%$	A-
Community Outreach and Advocacy (17.5%)	$(7/14) \times 100 = 50\%$	C
Support for Student-led Planetary Health Initiatives (17.5%)	$(13/15) \times 100 = 87\%$	A
Campus Sustainability (17.5%)	$(13/32) \times 100 = 41\%$	C-
Institutional Grade	$(71 \times 0.3 + 82 \times 0.175 + 50 \times 0.175 + 87 \times 0.175 + 41 \times 0.175) = 66.69\%$	B

Report Card Trends

Section Overview

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

