Planetary Health Report Card (Medicine) 2026:

University of Calgary

2025-2026 Contributing Team:

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The University of Calgary, located in the heart of Southern Alberta, both acknowledges and pays tribute to the traditional territories of the peoples of Treaty 7, which include the Blackfoot Confederacy (comprised of the Siksika, the Piikani, and the Kainai First Nations), the Tsuut'ina First Nation, and the Stoney Nakoda (including Chiniki, Bearspaw, and Goodstoney First Nations). The city of Calgary is also home to the Métis Nation within Alberta (including Nose Hill Métis District 5 and Elbow Métis District 6).

The University of Calgary is situated on land Northwest of where the Bow River meets the Elbow River, a site traditionally known as Moh'kins'tsis to the Blackfoot, Wîchîspa to the Stoney Nakoda, and Guts'ists'i to the Tsuut'ina. On this land and in this place we strive to learn together, walk together, and grow together "in a good way."

Summary of Findings

Overall Grade	B-

Curriculum	B

The University of Calgary's Cumming School of Medicine runs a 3-year program featuring the Re-Imagining Medical Education (RIME) curriculum launched in 2023. RIME utilizes a flipped classroom approach which utilizes multiple modes of curriculum delivery including online podcasts, in-person lectures, small tutorial group sessions with clinical cases, and an online flashcard platform called Cards. Weekly topics and objectives are typically delivered across multiple, if not all, formats. The first iteration of the curriculum in 2023 integrated several podcasts, lectures, tutorial group cases, and Cards decks discussing planetary health topics. These have been expanded over the past year and there is now a Planetary Health Curriculum Committee at the medical school – fantastic progress!

Recommendations: We suggest continuing to expand and integrate planetary health throughout the curriculum, in particular, addressing planetary health concepts that currently received a 0 score in this year's report card including: the unequal regional health impacts of climate change globally; reproductive health effects of industry-related environmental toxins; health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment; environmental impact of pharmaceuticals and over-prescribing as a cause of climate health harm; health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate (social prescribing); and strategies to have conversations with patients about the health effects of climate change. Additionally, continued collaboration amongst the pre-clerkship and clerkship deans, block leaders, week leaders, podcast creators, lecturers, and the Planetary Health Directors could support greater integration of planetary health learning objectives into clinical presentations (i.e. asthma, pregnancy) rather than isolating planetary health from clinical curriculum. We suggest that tutorial groups could be an accessible objective for deepening integration of planetary health throughout the curriculum, as many tutorial cases would only require minor alterations to include planetary health learning objectives and discussion points.

Interdisciplinary Research	B+

This grade has improved considerably from last year due to the increasing focus on planetary health research by many faculty, notably Drs. Sonja Wicklum and Clark Svrcek's Earth 2 Action project. Several faculty continue to integrate planetary health into their primary research interests or contribute to planetary health projects, including air pollution studies, environmental determinants of disease, and sustainable healthcare. We applaud their efforts!

Recommendations: Continue to work towards launching a planetary health research website with local research and opportunities.

Community Outreach and Advocacy	B

Though the medical school has held sustainability and planetary health events in the past, including the Planetary Health Collision workshop, the One Health Summer Institute, and Moving Mountains Climate Confluence; however these events are not consistently open to the public. There are no targeted sustainability newsletters, and planetary health courses for post-graduate providers are scarce. The Earth 2 Action (E2A) project bolsters this section by offering both community-facing resources and advocates for primary care providers to integrate planetary health into patient care.

Recommendations: The Planetary Health Directors could consider collaboratoring with One Health (hosted One Health Summer Institute in the past) and the Office of Institutional Commitments (hosted Moving Mountain Climate Confluence in the past) to offer an annual planetary health or climate action event open to community. A

dedicated newsletter for health-related sustainability updates could further support these efforts.

Support for Student-Led Initiatives — C

The University of Calgary offers various planetary health opportunities including a community garden, climate workshops, Indigenous plant medicine learning, and outdoor activities with the Wilderness Medicine Society. However, participation is optional, and students must independently seek mentors and projects. Sustainability initiatives are funded through the broader university, and this year, some medical students did receive scholarships for their work on planetary health initiatives.

Recommendations: We suggest the school create a website listing mentors and opportunities for planetary health involvement and establish a grant specifically for sustainability projects led by medical students.

Campus Sustainability — C

While the University of Calgary aims for carbon neutrality by 2050, progress is limited. Few buildings have solar panels, and many older structures lack energy-efficient retrofits. Despite resources like discounted transit passes and bike cages, most students still rely on cars, and the school could better promote active transportation.

Recommendations: The university should retrofit older buildings for sustainability, expand renewable energy use, and improve bike infrastructure and introduce carpool initiatives to reduce reliance on fossil fuels.

Statement of Purpose

Planetary health is human health.

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

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

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

Definitions & Other Considerations

Definitions:

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

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

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

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

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

specifically targeted for medical students, can meet this metric.

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

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

- **Cards:** an online flashcard platform which is integrated into the University of Calgary medical school curriculum. The Cards platform offers "decks" of flashcards which are aligned to weekly curriculum and learning objectives.

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

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

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

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

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

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

mitigate the inequitable effects of the climate crisis.

- **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).

Scoring Matrix

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

Other considerations:

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

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

Planetary Health Curriculum

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

Curriculum: General

1.1. Did your medical school offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
Yes, the medical school has offered **more than one** elective whose primary focus is ESH/planetary health in the past year. (3 points)	
Yes, the medical school has offered **one** elective whose primary focus is ESH/planetary health in the past year. (2 points)	
The medical school does **not** have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a **lecture** on planetary health. (1 point)	
No, the medical school has **not** offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. (0 points)	
Score Assigned:	0
There are currently no elective courses on Planetary Health or Sustainable Healthcare. The University of Calgary introduced a new medical curriculum, Reimagining Medical Education (RIME) in 2023, which currently offers one elective course called the History of Medicine. Planetary Health is incorporated into the required curriculum in both pre-clerkship and clerkship. *For future reports, the University of Calgary is introducing a new course "Ecosystem Approaches to Health", which will be an elective course on sustainability and healthcare. This course is expected to launch in 2026, so it cannot be included in this report. Additionally, this course directly conflicts with some other mandatory course components, which makes it difficult for students to adequately attend the required courses.*	

Curriculum: Health Effects of Climate Change

1.2. Does your medical school curriculum address the relationship between extreme heat, health risks, and climate change?
This topic was explored **in depth** by the **core** curriculum. (3 points)
This topic was **briefly** covered in the **core** curriculum. (2 points)
This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)	
Score Assigned:	3

This topic is covered extensively in Block 1 of pre-clerkship, where Planetary Health is introduced. In the first of two planetary health podcasts, climate-related impacts on health and health systems is discussed, including heat-related illness. Podcasts are created by the medical school as preparatory material which students are expected to review before in-person sessions. This podcast prepared students for an in-person lecture discussing health/climate change and associated health risks through a case discussion about a senior with cardiovascular risks in a heat island (1.3.2 LGB - October 16th, 2025. Climate and Health). In the same week, students had a small group case with a patient facing similar challenges.

Students are also tested on this concept through "Cards", an online flashcard platform which is integrated into the University of Calgary medical school curriculum. The Cards platform offers "decks" of flashcards which are aligned to weekly curriculum and learning objectives. Extreme heat, health risks, and climate change were explored through a deck on planetary health and tested knowledge of urban heat islands and their effect on health, including increasing exposure to high temperatures, worsening air pollution, and increasing flood risk.

Extreme heat and health returns later in the curriculum during clerkship. In the family medicine clerkship workshop, students attend a lecture on planetary health. This lecture discusses how vulnerable populations were exposed to an additional 475 million heatwave events in 2019, and how heat-related mortality in individuals above 65 years old increased 54 percent. In addition, the lecture briefly discusses how heat stress exacerbates kidney and cardiovascular health.

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

The impact of climate-related extreme weather events is discussed in a mandatory podcast in Block 1. In the first of two planetary health podcasts, climate-related disasters are covered with specific examples from Alberta (2020 NE Calgary hailstorm, 2018 Fort McMurray wildfires, 2013 southern Alberta floods, 2011 Slave Lake fire). This topic was discussed in a Climate & Health Lecture in the same week (1.3.2 LGB - October 16th, 2025. Climate and Health). Although the emphasis of the lecture was extreme-heat events, "Explore public health responses to climate change and extreme weather events" is a learning objective that is briefly covered. Students are tested on this concept through Cards. One practice question tests knowledge of the impact of extreme weather events on digestive health, including increased diarrheal illness from droughts, and increased prevalence of foodborne illness such as norovirus infections from heavy rain and flooding

This topic is covered again in clerkship, when it is discussed in the family medicine clerkship workshop, including the burden of extreme weather events on the healthcare system and additional resources used to mitigate their impact through warning systems and increased preparedness.

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

This concept is discussed throughout lectures and tutorial groups. Podcasts on Planetary Health mention that global warming contributes to the aggravation of specific infectious diseases, and students are shown a diagram outlining the relationship between climatic hazards and the presence of different pathogens. Additionally, a podcast series on Global Health also mentions increasing infectious disease due to climate change. Several lectures explore this topic, discussing vaccine distribution and climate, as well as extensive teaching on infectious diseases and associations with climate change. Students are also offered a two hour guest lecture from two One Health experts from veterinary medicine. This concept is introduced through the Cards content, with practice questions about global warming and infectious disease highlighting the increasing prevalence of diseases like chikungunya, Lyme disease, and malaria.

This topic is also discussed in the family medicine clerkship workshop. Increasing infectious disease is discussed as a part of the lecture component, including how storms, shifting weather patterns, changing biogeochemical flows, and changing biodiversity impact pathogens. Students are provided a handout with more information and literature sources related specifically to this topic.

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

This concept is explored in an online podcast which mentions that respiratory conditions are exacerbated by wildfire smoke and pollution. In-person lectures further explore potential aggravating factors when discussing respiratory health, and there is a slide which briefly mentions

wildfire smoke, air pollutants, as potential risk factors for pregnant people and older adults. In the same week, a tutorial group discusses a patient with lung disease who is affected by wildfire smoke. This concept also has associated Cards testing students' knowledge about the respiratory illnesses that are exacerbated by air pollution, including asthma, COPD, pneumonia, and lung cancer. There are also Cards exploring how to mitigate concerns for those with respiratory illness, by tracking the air-quality health index and counselling patients on modifying their activities. Finally, there are Cards on how climate change exacerbates childhood asthma through increased environmental pollutants and pollen.

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

The impact of climate change on cardiovascular health is not directly discussed in a podcast. It is discussed in a lecture in preclerkship, where the preceptor asks the class to discuss risk factors and health implications of living in a heat island on cardiovascular health. This lecture specifically mentions climate change and discusses the expected increased burden on the healthcare system due to climate change (1.3.2 LGB - October 16th, 2025. Climate and Health). Additionally, a student-led case presented in Block 1 of the curriculum focused on an elderly patient with cardiovascular risk factors experiencing heat-related stress in the summer months. Students are also tested on this concept through Cards. One practice question highlights the increased mortality of heart failure patients living in areas with lower air quality. Another practice question highlights how patients with heart failure are more susceptible to heat stroke.

This topic is also discussed in the family medicine clerkship workshop, where students attend a lecture on planetary health, which briefly discusses how heat stress exacerbates kidney and cardiovascular health.

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

This concept is discussed in two Planetary Health podcasts. In the first online podcast, climate anxiety is discussed, reporting that eight out of ten Canadians felt an impact of climate change on their mental health. In the second podcast, the concepts of eco-anxiety and ecological grief are also discussed. In addition, this concept is tested through Cards with a practice question on air pollution exposure's link to exacerbation of mental health disorders, as well as increased risk of schizophrenia and psychosis. Another practice question tests students' knowledge on how extreme heat events increase the vulnerability of those living with mental health or stress-related disorders.

This topic is also discussed in the family medicine clerkship workshop. The mental health burden of climate change is discussed as a part of the lecture component, including increased violence and aggression, less connection with nature, increased hopelessness, and increased ecological grief. Mental health is also one of the topics discussed when students are broken up into small groups. Students are provided a handout with more information and literature sources related specifically to this topic.

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

This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3

This concept is mentioned in a Planetary Health podcast as well as a Global Health and Diarrheal Illness podcast. These podcasts explore how climate change can lead to malnutrition through water contamination, decreased food supply, and loss of agricultural productivity. Disruption to ecosystem health is also mentioned, including habitat and biodiversity loss, soil loss, water shortage, and rising sea levels. We also receive an in-person lecture in discussing the concept of One Health, with a learning objective of "Providing examples of how animal, human and environmental health professionals can collaborate on 'wicked' problems." These problems included zoonotic/infectious diseases, parasitism, anti-microbial resistance, and water safety/contamination. Several case studies highlight these topics, including international campaigns in Tanzania regarding parasitism and the close relationship with livestock, alongside more local examples like the contaminated water in a local berry farm, and the gradual spread of Chronic Wasting Disease into wildlife in Alberta. Additionally, this topic is the focus of a Tutorial Group case in Block 3, where a rural family presents to the emergency department with gastrointestinal symptoms likely associated with infected well water.

Water and food insecurity as a result of climate change is also briefly mentioned in the family medicine clerkship workshop. This includes a reference to food insecurity, with the global crop yield potential decreasing from 1.8 to 5.6 percent from 1981 to 2019.

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

This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
The disproportionate impact of climate change on vulnerable populations is covered in the Planetary Health podcasts. These podcasts discussed the impact of climate change on vulnerable populations including the elderly, people with chronic health conditions, people with low socioeconomic status, people without access to cooling, and people living alone. This is further emphasized in an in-person lecture which goes over a case study to highlight these points (1.3.2 LGB - October 16th, 2025. Climate and Health). One learning objective for a small-group session in the same week also includes "Examine the social and structural factors which determine who is most at risk from extreme heat and other environmental events." In addition, this concept is introduced through Cards, with a practice question on how climate change exacerbates the effects of colonialism on the traditional health practices of Indigenous communities in Northern Canada and another question exploring how climate change has led to increased food insecurity in Indigenous communities. *This topic is also discussed in the family medicine clerkship workshop. The disproportionate burden on vulnerable populations is covered, with an emphasis on Indigenous communities. This includes disparities in well-being, food and water insecurity, land use and resource extraction, and more.*	

1.10. Does your <u>medical school</u> curriculum address the unequal regional health impacts of climate change globally?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	0
Health impacts of climate change on a global scale, such as forced migration, is currently not discussed in the curriculum in depth. Displacement is briefly mentioned in one of the mandatory online podcasts including Alberta wildfires and the 2014 Calgary flood, but it is not explored on a global level. In the Global Health podcast series, climate change is mentioned to impact different regions primarily as a consequence of increasing infectious disease, but other modalities are not discussed.	

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, microplastics)?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	0
Reproductive health effects of industry-related environmental toxins such as air pollution or pesticides is currently not discussed in the curriculum in any online podcast, in-person lecture, or practice material on the Cards platform.	

1.12. Does your medical school curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Human-caused environmental threats relevant to the surrounding community are discussed briefly in the online mandatory podcasts, Cards, and case-based learning. One of the topics we have focussed on includes the increasingly severe BC and Alberta wildfires that will impact the pulmonary health of our future patients with decreasing air quality and community displacement. Another topic covered includes the rising temperatures that will lead to increased heat-related illness during the summer months, disproportionately impacting vulnerable communities. This is especially important in Calgary given the lack of air-conditioning in many residential buildings.	

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

This concept is not discussed in any in-person lecture of preclerkship. Although students are required to attend in-person Indigenous Health lectures, there is currently not an emphasis on the interplay between Indigenous knowledge and planetary health in these sessions.

However, the importance of Indigenous knowledge is discussed briefly in one of the online planetary health podcasts. The first podcast discusses Indigenous perspectives on the determinants of planetary health, including the importance of self and community relationships, as well as the role of women in keeping cultural identity and caretaking of the natural environment. The importance of interconnectedness with nature is mentioned as a key component for a healthy future.

The importance of Indigenous knowledge is also briefly discussed in the family medicine clerkship workshop. Specifically noting that prioritizing Indigenous groups in policy decisions on resource extraction and ecological stewardship can have direct benefits to public health.

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

The disproportionate impact of climate change on vulnerable populations is briefly covered in the first of two podcasts on planetary health mentioned above. The concept of environmental racism was introduced with examples such as lack of access to green spaces for racialized communities, lack of access to clean drinking water on reserves, and geographic situating of waste disposal sites and other toxic industries near marginalised communities, including oil sands encroaching on Indigenous communities in Alberta. In addition, this concept is introduced through the content distributed on the Cards platform, through one practice question on Urban heat islands. In the description, the practice question notes that lower income urban neighborhoods generally have higher temperatures and more residents vulnerable to the effects of extreme heat, and racialized communities are more likely to be exposed to urban heat islands.

Curriculum: Sustainability

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

Score Assigned:	2

The benefits of a plant-based diet on the environment and individual health are briefly mentioned during in-person lectures as one of many lifestyle changes that could be suggested for patients. This concept is also introduced through Cards, with a practice question about a plant-based diet, highlighting that meat-based diets consume more land, energy, and water than plant-based diets for the same amount of calories.

This topic is also discussed in the family medicine clerkship workshop, as plant-based diets is one of the topics discussed when students are broken up into small groups, however, it is one of many topics and must be chosen by students as a topic of interest. Students are provided a handout with more information and literature sources related specifically to this topic.

1.16. Does your medical school curriculum address the carbon footprint of healthcare systems?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3

The carbon footprint of healthcare is discussed in both online podcasts required by the core curriculum. In the first podcast, it is mentioned that the healthcare sector is responsible for nearly 5 percent of global GHG emissions. This is further broken down into GHG emissions from healthcare institutions directly, the supply chain, personal travel, and commissioned health services outside the primary institutions. The second podcast focuses on strategies to reduce the carbon footprint of healthcare, by becoming advocates and greening healthcare practices. This is also discussed in the in-person climate lecture as well through an activity where students brainstorm ways the healthcare system may decrease its carbon footprint (1.3.2 LGB - October 16th, 2025. Climate and Health).

This topic is also discussed in the family medicine clerkship workshop. The reference to 5 percent of GHG emissions is discussed again here, as well as the contribution from production, delivery, disposal of medications, water and plastics use, energy to heat buildings, and transportation of people to care. The workshop now also has a component of carbon footprint literacy, teaching the basic approach to carbon footprint assessment with basic practice and examples.

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

The health **and** environmental **co-benefits** of **non-pharmaceutical management** of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK. (1 point)	0
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)	1
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

1. *Although students learn to avoid over-medicalisation, over-investigation, and over-treatment, this is not taught in the context of environmental benefit.*
2. *Although students are taught about medication reconciliation and the importance of deprescribing where possible, this is not taught in the context of environmental benefit.*
3. *Although students are taught about non-pharmacological management and social prescribing, this is not taught in the context of environmental benefit.*
4. *Although students were given an example of a surgical carbon lifecycle analysis in the FM clerkship workshop, waste mitigation and best practices are not explicitly taught in the curriculum.*
5. *The impact of anesthetic gases on the healthcare carbon footprint is covered in the second planetary health podcast, as well as through the online Cards platform. Students learn that while desflurane is clinically comparable to other anesthetic gases, it has a substantially higher global warming potential (2500 times greater) compared to isoflurane and sevoflurane.*
6. *The impact of inhalers on the healthcare carbon footprint is covered in the second planetary health podcast, as well as through the online Cards platform. Students learn that metered dose inhalers (MDIs) have a greater carbon footprint compared to dry powder inhalers (DPIs), due to their use of hydrofluoroalkane propellants. Students learn to prescribe DPIs over MDIs, as they are clinically equivalent, often preferred by patients, and have environmental benefits.*
7. *Waste production within healthcare clinics and specific strategies are taught throughout the FM clerkship workshop as a part of the flipped classroom component. Greening clinics and offices is one of the topics chosen for students to research and present to the rest of the group.*

Curriculum: Clinical Applications

1.18. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies to have conversations with patients about the health effects of climate change?
Yes, there are strategies introduced for having conversations with patients about climate change in the **core** curriculum. (2 points)

Yes, there are strategies introduced for having conversations with patients about climate change in **elective** coursework. (1 point)
No, there are **no** strategies introduced for having conversations with patients about climate change. (0 points)

Score Assigned:	0

There are currently no strategies or resources provided to students to discuss climate change with patients. However, the concept of co-benefits to patients is briefly mentioned in the FM clerkship workshop.

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

Students are introduced to Occupational Medicine which includes introduction to an environmental and exposure history. Students are also taught to take an environmental history as a part of clinical skills throughout pre-clerkship. In communications sessions, students practise taking an exposure and environmental history in simulations with standardised patients, including occupational history and workplace exposures, place of residence and housing environment, dietary food and water intake, and travel history.

Curriculum: Administrative Support for Planetary Health

1.20. Is your <u>medical school</u> currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?
Yes, the medical school is currently in the process of making **major** improvements to ESH/planetary health education. (4 points)
Yes, the medical school is currently in the process of making **minor** improvements to ESH/planetary health education. (2 points)
No, there are **no** improvements to planetary health education in progress. (0 points)

Score Assigned:	4

In 2023, the University of Calgary created new content focusing on planetary health, global health, and related topics. This included several podcasts, lectures, tutorial group patient cases, and Cards decks. In 2024, Dr. Sonja Wicklum was appointed as the Director of Planetary Health, and Dr. Stephen Wilton was appointed as the Associate Director of Planetary Health. These roles include overseeing curriculum content and education on sustainable healthcare and planetary health. A Planetary Health Curriculum Committee has been developed and is working with the

Undergraduate Medical Education staff to integrate planetary health more thoroughly into the curriculum.

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:	2
The pre-clerkship curriculum at University of Calgary is made up of three 6-month blocks. Most of the planetary health content is in Block 1, with some mention in Block 3. We have several podcasts, lectures, tutorial group patient cases, and classroom discussion in Block 1. However in Block 3, we only have one student-led patient case discussing climate change. The goals of this case were to recognize climate-related illness, those at increased risk, and the co-benefits of climate change mitigation, among others. *Planetary health is incorporated into the clerkship curriculum through the family medicine core rotation as a standalone topic. However, key concepts can also be integrated into other rotations, as planetary health is a shared responsibility of all physicians, regardless of specialty. For instance, in pre-clerkship, students learn about the carbon footprint of different anesthetic gases, however, this should be revisited in clerkship, to better understand practical and institutional barriers to using isoflurane or sevoflurane over desflurane.*	

1.22. Does your <u>medical school</u> employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?	
Yes, the **medical school** has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)	
No, the **medical school** does **not** have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)	
Score Assigned:	1
Official as of December 1, 2024, the University of Calgary's Cumming School of Medicine appointed the Director and Associate Director of Planetary Health, Dr. Sonja Wicklum (sonja.wicklum@ucalgary.ca) and Dr. Stephen Wilton (sbwilton@ucalgary.ca). The Director of Planetary Health is responsible for the development and implementation of the school's planetary health strategy. This includes leading and coordinating education, research, and outreach activities related to planetary health, and collaborating with academic units to oversee curriculum content.	

1.23. Does your health professional curriculum include teaching on civic engagement/advocacy to address the environmental and structural determinants of health?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
In the large group lecture, one of the learning objectives is "discuss the role of the medical profession in climate advocacy". There is also a similar goal in the small group sessions regarding physicians' roles in climate policy and advocacy. One of the mandatory online podcasts (Planetary Health 2) also focuses on physicians'/medical students' role in sustainable healthcare and how they can get involved. Throughout the curriculum, there is ongoing emphasis on acknowledging and addressing structural determinants of health, and how physicians need to consider and accommodate potential barriers to healthcare when helping patients.	

Section Total (49 out of 75)	**65%**

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Interdisciplinary Research

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

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

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

Score Assigned:	3

One Health at the University of Calgary was founded as an emerging research theme in 2019, committed to addressing complex problems at the convergence of people, animals, and the environment and the underlying economic and social factors that determine the opportunities for health across all ecosystems. It focuses research efforts on: i) antimicrobial resistance, ii) healthy water ecosystems, iii) infectious diseases and the microbiome, and iv) healthy communities.

One Health website: https://research.ucalgary.ca/one-health

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

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

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

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

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

Score Assigned:	1

Dr. Wicklum collaborates closely with Indigenous communities, while researchers from the Arctic Institute of North America and the University of Calgary also conduct studies within these communities (https://arctic.ucalgary.ca/research). While communities have opportunities to provide input on these specific projects, there is no formal process for them to advise or contribute to the school's research agenda

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:	2

The University of Calgary has a website page (https://research.ucalgary.ca/one-health) dedicated to One Health which highlights some of the research, training opportunities, and One Health international events occurring. However, it lacks upcoming events at the University of Calgary, leaders in planetary health at our institution, and relevant funding opportunities. The Cumming School of Medicine is not explicitly involved in the One Health initiative and is mostly focused on veterinary medicine. Despite this, a new website is currently in the works, through the newly implemented Planetary Health Office at the Cumming School of Medicine, by Drs. Wicklum and Wilton.

The Cumming School of Medicine has a website for Planetary Health, the website is accessible to users, however, some sections are still under construction and the website is not fully comprehensive yet. Specifically, the sections dedicated to learning about planetary health and the student environmental interest group are still under construction. (https://cumming.ucalgary.ca/departments/family-medicine/research-scholarly-activity/current-research-projects/planetary-health)

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:	3

The institution has not hosted a conference on planetary health, however, planetary health workshops and events have been held annually.

The University of Calgary hosted a conference on sustainability called 'Together / Ensemble 2025' from May 26-27, 2025. The conference themes ranged from planetary health and water innovation to Indigenous and youth leadership with the intention of engaging students and inspiring all to work together for a sustainable future. Specific to planetary health, Dr. Nicole Redvers delivered an opening keynote and hosted the Dene Ch'anié ('the path we walk'): Indigenous Perspectives on Planetary Health (https://ucalgary.ca/news/ucalgary-hosted-conference-sustainability-will-call-collective-action-across-generations).

The University of Calgary also holds an annual One Health Summer Institute with a focus on watershed planning and management in 2025.

The University of Calgary has also collaborated with Regeneration Society on an annual climate conference, Moving Mountains Climate Confluence. The focus is to bring together people working on climate action across different sectors. The focus is not specific to Planetary Health or sustainable healthcare, but is open to those working on these topics.

In 2024, the University of Calgary held a transdisciplinary full-day workshop, the Planetary Health Collision, through the Cumming School of Medicine, O'Brien Institute for Public Health, and members from One Health. The workshop integrated diverse disciplines, including engineering, ecology, urban planning, and the arts, to address human health in the context of planetary health education, research, and policy.

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 point)	
No, the institution is **not** a member of such an organisation. (0 points)	
Score Assigned:	1

On a national level, the Cumming School of Medicine is not directly a member of any organisations, however, students and faculty at the school are involved in multiple planetary health organisations. These include the Canadian Federation of Medical Student's Health and Environment Adaptive Response Taskforce (CFMS HEART), the Canadian Coalition for Green Health Care (CCGHC), and the Canadian Association of Physicians for the Environment (CAPE).

On an international level, the Cumming School of Medicine is a member of the Global Consortium on Climate and Health Education. And although the school is not directly a member of the Planetary Health Alliance, its faculty are actively involved in CAPE, an organization that is a member of the Planetary Health Alliance.

The University of Calgary is a signatory on the Academic Health Institutions' Declaration on Planetary Health, which calls for academic health institutions across the world to take immediate action to halt the negative impacts of their activities on the planet's natural systems.

Section Total (13 out of 17)	**76%**

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Community Outreach and Advocacy

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

3.1. Does your institution partner with community organisations to promote planetary health?	
Yes, the **institution** meaningfully partners with **multiple** community organisations to promote planetary and environmental health. (3 points)	
Yes, the **institution** meaningfully partners with **one** community organisation to promote planetary and environmental health. (2 points)	
The **institution** does not partner with community organisations, but participates in community focused events relating to planetary health. (1 point)	
No, there is **no** such meaningful community partnership. (0 points)	
Score Assigned:	3
Faculty members, Drs. Sonja Wicklum and Clark Svrcek, are leading a community research project, Earth 2 Action, partnered with Re:Climate for greening community-based clinic operations and clinical care. There are several other community partners that are meaningfully engaged in this project including family medicine clinics and community organizations throughout the City.	

3.2. Does your institution offer community-facing courses or events regarding planetary health?	
The **institution** offers community-facing courses or events at least once every year. (3 points)	
The **institution** offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points)	
The **institution** has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point)	
The **institution** has not offered such community-facing courses or events. (0 points)	
Score Assigned:	2

In 2025, the One Health Summer Institute offered a course open for application, though spots were limited. Notably, being a student or a UCalgary member is not a requirement to participate. However, the language surrounding the course suggests it was not designed primarily for community audiences. While the course is not led by the Cumming School of Medicine (CSM), several CSM members are actively involved. *Drs. Svrcek and Wicklum also developed a Planetary Health Collision Workshop in 2024 hosting roundtable discussions that brought together researchers, community members, and learners. This event was not held in 2025.*

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:	0
There is a specific sustainability newsletter that students can opt-in to receive from the Office of Institutional Commitments (https://www.ucalgary.ca/sustainability/get-involved), but it is not focused on a health professional audience. There are no specific sustainability newsletters or communications from the Cumming School of Medicine.	

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:	1
The medical school and its affiliated hospitals offer limited in-person or online courses on planetary health for post-graduate providers. However, Alberta Health Services offers a course at	

Rockyview General Hospital designed to educate and inspire frontline healthcare workers (https://www.albertahealthservices.ca/rgh/Page17522.aspx).

3.5. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about environmental health exposures?	
Yes, the **institution** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated medical centres have accessible educational materials for patients. (0 points)	
Score Assigned:	2
Alberta Health Services has a website that includes multiple types of environmental health exposures (https://www.albertahealthservices.ca/eph/page8294.aspx). However, these should be expanded to include environmental exposures related to climate change, such as air pollution, wildfire smoke, and heat waves.	

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
The province-wide AHS website has accessible educational information regarding the health impacts of climate change with respect to air quality events, which can be found at the following website: https://www.albertahealthservices.ca/news/air.aspx. It also features detailed guidance on wildfire smoke exposure and additional resources to help patients protect their health during such events. In addition, the Surgical Clinical Network now has a Sustainability Group across AHS, which is a dedicated group of clinicians, administrators, patients, and policy makers working to advance surgical care in Alberta. *The Cumming School of Medicine has an Earth to Action (E2A) initiative which features educational campaigns which can be used for both healthcare providers and patients. For instance, there is a campaign for 'Preparation for Extreme Heat and Wildfire Smoke' (https://cumming.ucalgary.ca/departments/family-medicine/research-scholarly-activity/current-research-projects/planetary-health/e2a/e2a-extreme-heat-campaign).*	

Section Total (10 out of 14)	**71%**

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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:	1
Interested students can pursue sustainability initiatives and/or QI projects, however this must be done based on personal interest, as there is no requirement in the curriculum for student sustainability projects. Faculty members support students in their efforts to succeed in these projects, however, financial support remains to be a challenge. *Students can apply for grants towards sustainability projects through the Student's Union Sustainability Fund, however, this is not specifically for medical students. In addition, there is funding for student initiatives through the Canadian Federation of Medical Students (CFMS), but this can be challenging to obtain, as students are competing for funding across the country and across any topic. In 2024, a group of students in the Environmental Health Interest Group (EHIG) applied for $650 worth of funding through the CFMS Student Initiative Grant. The purpose of this project was to support pharmacies transition to using eco-friendly prescription bottles, however, the project was not pursued as funding was denied.* *In 2025, students working on Planetary Health research were offered scholarships to acknowledge their contributions to local climate action.*	

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

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

Score Assigned:	1

Medical students are required to find a supervisor and complete a small research project over the course of their pre-clerkship curriculum. Any type of project is allowed, and students are encouraged to pursue fields of interest. Supervisors involved in planetary health research at the school are often more than willing to accept students interested in pursuing related projects, however students must seek these opportunities out themselves, however, there are not currently any research opportunity populated on the website yet and the website for Planetary Health is still under construction

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

Score Assigned:	1

A new webpage is currently available through the newly implemented Planetary Health Office at the CSM. The University of Calgary Planetary Health webpage is starting to develop some information on research projects, however, the website is still very sparse with details and lacks some key information regarding mentorship and project ideas.

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

The Environmental Health Interest Group (EHIG), made up of medical students, has been operating at the University of Calgary for several years. As part of their yearly activities, the EHIG runs campaigns, research projects, and events geared towards fostering interest in environmental health among the student body and sustainability improvements within the medical school. These projects have been supported by faculty consistently. Drs. Sonja Wicklum and Stephen Wilton were appointed the Directors of Planetary Health in 2024, their roles include offering faculty support to EHIG. The group is also supported by Dr Clark Svrcek from the Department of Family Medicine.

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

Score Assigned:	0

The Calgary Medical Student Association (student council) has a dedicated role for a Local Officer of Environmental Health & Sustainability in their Global Health portfolio, whose responsibilities include advocating for sustainable practices at school and engaging the student body in topics related to planetary health. This is an elected position voted on by each class. The Local Officer of Environmental Health & Sustainability works with the Environmental Health Interest Group as a liaison between the students and student council to communicate concerns and ideas related to sustainability at the school. However, the Local Officer of Environmental Health & Sustainability does not have a direct seat on the decision-making counsel, and therefore has limited influence on school policy.

4.6. In the past year, has the institution had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	**Score**
Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.	1
Panels, speaker series, or similar events related to planetary health that have students as an intended audience.	1

Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.	0
Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	0
Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	0
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1

The University of Calgary has a community garden as well as a seed library that interested students can help operate.

The Environmental Health Interest Group (EHIG) hosts speaker series on climate change and planetary health geared towards medical students. They have also worked closely with the Canadian Association of Physicians for the Environment in the past to plan campaigns on sustainability in healthcare and educational talks. As part of these events, students are shown ways to engage in climate action as future physicians and introduced to local healthcare professional groups advocating for change in healthcare practices.

During AMSCAR 2025, there was a workshop on Indigenous Medicines and participants could make a small medicine bag as part of their learning.

The Wilderness Medicine Society is a medical-student run interest group that organises several outdoor activities for students to engage in throughout the year. Some of these include river rafting, hiking, and rock-climbing. This is in addition to hosting workshops geared towards teaching students skills for practicing medicine in remote environments where few resources are present.

Section Total (8 out of 15)	**53%**

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Campus Sustainability

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

5.1. Does your institution have an Office of Sustainability?	
Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is **at least one designated staff member** for sustainability at the hospital. (3 points)	
There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but **no specific staff member** in charge of hospital sustainability. (2 points)	
There are **no salaried sustainability staff,** but there is a sustainability task force or committee. (1 point)	
There are **no** staff members **or** task force responsible for overseeing campus sustainability. (0 points)	
Score Assigned:	3
The University of Calgary has an Office of Institutional Commitments with several full-time staff dedicated to campus sustainability. The medical school also has a Planetary Health Director and Associate Director. The medical school collaborates with the main campus Office of Institutional Commitments on hospital sustainability initiatives.	

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
The University of Calgary has a written and approved plan, the 2019 Climate Action Plan, to achieve carbon neutrality by 2050. The plan includes measures such as optimizing energy	

efficiency in buildings, expanding renewable energy sources, and integrating sustainability into research and education to help drive the transition to a low-carbon future. (https://www.ucalgary.ca/sustainability/strategy/climate-action-plan).

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
The University of Calgary is actively incorporating renewable energy solutions across its campus to promote sustainability. One example is the solar panel installation on the Social Sciences Building, which contributes to the university's renewable energy generation efforts (https://www.ucalgary.ca/sustainability/our-sustainable-campus/climate-and-energy). While the Cumming School of Medicine currently lacks dedicated renewable energy installations, the university as a whole is making strides in energy transition. In March 2023, the university launched the "Energy for the Common Good" strategy, which focuses on advancing research and training to promote sustainable, climate-appropriate, and accessible energy services for the community (https://www.ucalgary.ca/news/ucalgary-launches-new-energy-research-strategy-focused-energy-transition). This strategy adopts a transdisciplinary approach to energy research, aiming to drive long-term progress in energy transition efforts.	

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

The University of Calgary has several examples of sustainable building practices for new buildings (i.e. Leadership in Energy and Environmental Design Platinum certified Child Development Centre) as well as some sustainable retrofits (i.e. Leadership in Energy and Environmental Design Platinum MacKimmie Complex and Redevelopment Project). However, most old buildings have not been retrofitted.

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
The University of Calgary provides full-time students with a discounted transit pass, and the Cumming School of Medicine offers a lockable bike cage for bike commuters. However, the school does not actively promote safe active transportation, and the majority of students rely on driving to campus. Many students are assigned to hospitals and clinics across the city, which can be challenging to access without a car. In addition, every student must complete a four-week rural rotation during clerkship, which can place them up to seven hours away from Calgary, typically requiring access to a personal vehicle.	

5.6. Does your institution have an organics recycling program (compost) and a conventional recycling program (aluminium/paper/plastic/glass)?	
Yes, the institution has **both** compost **and** recycling programs accessible to students and faculty. (2 points)	
The institution has **either** recycling **or** compost programs accessible to students and faculty, but not both. (1 point)	
There is **no** compost or recycling program at the institution. (0 points)	
Score Assigned:	2
The University of Calgary and Cumming School of Medicine have both compost and recycling bins throughout the campus. Above each bin, there is a board that clearly explains which items belong in each bin, helping to promote proper waste sorting and sustainability practices.	

5.7. Does the institution apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?	
Yes, the institution has a**dequate s**ustainability requirements for food and beverages, including meat-free days or no red-meat, and **is engaged** in efforts to increase food and beverage sustainability. (3 points)	
There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution **is engaged** in efforts to increase food and beverage sustainability. (2 points)	
There are sustainability guidelines for food and beverages, but they are **insufficient or optional.** The institution is **not** engaged in efforts to increase food and beverage sustainability. (1 point)	
There are **no** sustainability guidelines for food and beverages. (0 points)	
Score Assigned:	2
The University of Calgary Food Services works with its suppliers to ensure that goods sold on campus come from farmers and artisans who work in safe environments and receive fair wages. The University of Calgary was the first in Alberta to receive Fair Trade Certification. All campus food vendors are Styrofoam free. They also promote locally grown products, purchase dairy products from provincial suppliers, provide vegetarian, vegan, halal, and gluten-free options, and source sustainable seafood and fish with the Marine Stewardship Council (https://www.ucalgary.ca/ancillary/sustainability/sustainability-food-services). There are some edible gardens on campus as well, however none are located at the Cumming School of Medicine.	

5.8. Does the institution apply sustainability criteria when making decisions about supply procurement?	
Yes, the institution has **adequate** sustainability requirements for supply procurement **and** is **engaged** in efforts to increase sustainability of procurement. (3 points)	
There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **engaged** in efforts to increase sustainability of procurement. (2 points)	
There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **not engaged** in efforts to increase sustainability of procurement. (1 point)	
There are **no** sustainability guidelines for supply procurement. (0 points)	
Score Assigned:	2
The University of Calgary integrates sustainability into its procurement processes by favoring suppliers who demonstrate a commitment to sustainable practices. Supply Chain Management aligns closely with the university's institutional commitment to integrating sustainability into all aspects of campus operations. This includes integrating sustainability practices and principles into the purchasing processes for all applicable product and service categories. To become a UCalgary preferred supplier, the university's evaluation process favors suppliers who demonstrate their own commitment to sustainability and alignment with the university's institutional values. The	

university's Institutional Sustainability Strategy further emphasizes the importance of responsible purchasing practices based on recognized third-party rating systems (https://www.ucalgary.ca/sustainability/our-sustainable-campus/purchasing).

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

All events at the Cumming School of Medicine that request funding from the Calgary Medical Students' Association (CMSA) must abide by the CMSA Sustainability Policy. However, the institution does not require events to abide by these criteria.

Excerpt from policy:

RECOMMENDATIONS

1. Create a stipulation that any and all student groups applying for CMSA Clubs Funding must:

a. Acknowledge and agree to abide by the CMSA Policy on Sustainable Events and Zero Waste Culture, via signature.

b. Outline their personalized strategy for creating a Sustainable and/or Zero Waste Event.

c. Describe ways in which said sustainability/zero waste strategy was implemented after the event has taken place. This shall be done as a part of the reimbursement process and incorporated into future funding decisions.

2. Include a reusable bowl/plate/cutlery in the Orientation Swag Bag for students to bring to events, as their personal responsibility.

3. Encourage students to bring their own water bottles to student events, and avoid providing single use beverage containers.

4. Ban the use of Styrofoam at student events.

5. Contact University of Calgary Facilities to get their assistance in optimal recycling and waste management (i.e., pizza sized recycling bins).

5.10. Does your institution have programs and initiatives to assist with making lab spaces more environmentally sustainable?
Yes, the institution has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable. (2 points)
There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)
There are **no** efforts at the institution to make lab spaces more sustainable. (0 points)

Score Assigned:	2
The University of Calgary is committed to enhancing the environmental sustainability of its lab spaces through various programs and initiatives. This includes the Campus as a Learning Lab (CLL) initiative, which encourages students, faculty, and staff to collaborate on projects that promote sustainability across campus operations, including laboratory settings (https://ucalgary.ca/sustainability/campus-learning-lab). In addition, the Sustainable Thermal Energy Systems Laboratory at the university focuses on developing and optimizing energy systems for a sustainable future, contributing to the broader goal of environmental sustainability in research practices (https://www.ucalgary.ca/labs/thermal-energy-systems/home).	

5.11. Does your institution's endowment portfolio investments include fossil-fuel companies?	
The institution is **entirely divested** from fossil fuels **and** has made a **commitment to reinvest divested funds** into renewable energy companies or renewable energy campus initiatives. (4 points)	
The institution is **entirely divested** from fossil fuels. (3 points)	
The institution has **partially divested** from fossil fuel companies **or** has made a **commitment to fully divest**, but **currently** still has fossil fuel investments. (2 points)	
The institution has **not divested** from fossil-fuel companies, but faculty and/or students are **conducting organised advocacy** for divestment. (1 point)	
Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to change that. (0 points)	
Score Assigned:	0
In 2015, the University of Calgary publicly stated that there was no intention to divest from fossil fuels. The university cited its significant philanthropic support from the energy sector and the province's reliance on oil and gas revenues as factors influencing this decision (https://financialpost.com/commodities/energy/university-of-calgary-will-not-divest-from-fossil-fuels).	

Section Total (15 out of 32)	**47%**

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Grading

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

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

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

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	(49/75) x 100 = 65%	B
Interdisciplinary Research (17.5%)	(13/17) x 100 = 76%	B+
Community Outreach and Advocacy (17.5%)	(10/14) x 100 = 71%	B
Support for Student-led Planetary Health Initiatives (17.5%)	(8/15) x 100= 53%	C
Campus Sustainability (17.5%)	(15/32) x 100 = 47%	C
Institutional Grade	**(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 63%**	**B-**

Report Card Trends

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