Planetary Health Report Card (Medicine) 2026:

Oregon Health & Science University

2025-2026 Contributing Team:
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Summary of Findings

Overall Grade	C+

Curriculum	B

- OHSU includes planetary health in both didactic and clinical curricular phases, specifically featuring three lectures required for all medical students and a fourth which covers at least 50% of each class.
- In the didactic phase, various aspects of planetary health are discussed in a few lectures; two years ago an independent lecture was developed by a medical student dedicated to planetary health and incorporated into the curriculum. The lecture covers the physiological impacts of air pollution and extreme heat given its relevance to Oregon, environmental racism and justice, and explored a clinical case.
- A required lecture in the Family Medicine Core rotation provides a discussion of many of the impacts of climate change and human health, healthcare's carbon footprint, and climate injustice.
- All OHSU medical students are required to take two didactic intersessions during the clinical phase; 3 of the 5 intersessions feature a lecture on Planetary Health.
- All M4s are required to attend a more in-depth planetary health lecture as part of their Transition to Residency Course.
- An interprofessional education elective course covering planetary health in depth is available to all OHSU students.
- **Recommendations:** There is growing integration of clinically-relevant planetary health skills (taking a H&P, making recommendations, etc); OHSU is continuing to work on including this more throughout the curricula longitudinally.

Interdisciplinary Research	C

- The Center for Primary Care Research and Innovation is in the process of creating the Primary Care Climate Change and Health Program with the goal of building climate change resilience within our local communities through education, public health policy and practice, research and innovation, and healthcare sustainability. OHSU as an institution houses the Oregon Institute for Occupational Health but this is not a part of the medical school. There are researchers at this institute, the School of Public Health, and at OHSU hospital who do planetary health research, including faculty of the medical school.
- **Recommendations**: OHSU SOM could direct resources to creating an interdisciplinary research group that focuses on planetary health research and create an associated website to centrally present their work to the public.

Community Outreach and Advocacy	D+

- OHSU SOM offers a few community-facing courses or events regarding planetary health. There have been a few from the Oregon Institute of Occupational Health for example.
- **Recommendations**: OHSU SOM could create accessible educational materials for patients about environmental health exposures and the health impacts of climate change. There are also plenty of opportunities to connect with community groups for advocacy and education efforts.

Support for Student-Led Initiatives	B-

- OHSU supports the student group OHSU Students for a Sustainable Future which is dedicated to planetary health and receives faculty leadership and student government funding.

- **Recommendations**: Create grant funding for students to lead sustainability initiatives. Provide support to connect students with planetary health research mentors

Campus Sustainability	C

- OHSU has made strides towards becoming a sustainable institution by offering financial incentives for alternative transportation to campus, providing recycling and composting services, and sourcing cafeteria food from sustainable sources. They have also responded positively to a student-led divestment campaign and begun to partially divest from fossil fuels. OHSU has publicly announced a goal of reducing carbon emissions. OHSU also has a commitment to wildlife conservation on its campus, including maintaining a 50+ acre conservation area in the West Willamette wildlife corridor, achieving Salmon-Safe Certification, and installing over 135,000 square feet of green roofs on buildings to reduce the impact of stormwater runoff on fish habitats.
- **Recommendations**: Could create a structured and funded Office of Sustainability to lead efforts in establishing sustainability goals and implementing interventions to achieve those goals. Areas for improvement would be specific event sustainability guidelines and recommendations for lab spaces on sustainable practices. OHSU could also establish more ambitious carbon footprint reduction goals.

Statement of Purpose

Planetary health is human health.

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

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

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

Definitions & Other Considerations

Definitions:

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

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

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

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

- **Medical School/Department vs. Institution:** When "Medical school" is specified in the report card, this only refers to curriculum and resources offered by the School/department of Medicine and does not include offerings from other parts of the university (e.g. undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when "institution" is specified in the report card, we are referring to the university more broadly

including all of its campuses. Any resource reasonably accessible by medical students, no matter where in the institution the resource comes from or if it is specifically targeted for medical students, can meet this metric.

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

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

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

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

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

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

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

- **Climate justice:** The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already

economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.

- **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.

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:	2
Score Explanation: In 2021 OHSU began offering an annual interdisciplinary elective available to medical students entitled Climate Change and Human Health. The syllabus includes topics such as planetary health, healthcare's ecological footprint, and vector and water-borne diseases. This elective generally enrolls upwards of 50 students from the School of Medicine, the School of Nursing, and the School of Public Health.	

Curriculum: Health Effects of Climate Change

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

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

Score Explanation:

- All MD students attend at least three longitudinally spaced lectures on Planetary Health, and many attend a 4th.
- M1, all students: in the core curriculum for preclinical students, during the M1 Cardio-Pulmonary-Renal (CPR) block, a lecture titled "An Introduction to Planetary Health" includes multiple slides on extreme heat, heat-related illness, and urban heat islands. It explores the physiology of heat acclimatization, risk factors, a case study on heat illness, urban heat islands, and clinical skills for addressing heat related illness (questions to ask during H&P).
- M1, all students: In the core curriculum for preclinical students, during the Cardio-Pulmonary-Renal (CPR) block, a lecture titled "Progression of Chronic Kidney Disease" includes a few slides referencing areas of high rates of chronic kidney disease globally, drawn from "Mesoamerican Nephropathy or Global Warming Nephropathy" by Jimenez et al.
- M2, approximately 50% of medical students: As part of the Cancer and Infectious Disease intersessions (all students are required to take two intersessions, approximately 50% of students will take one of these), students receive a one-hour lecture and small group discussion. Reflection is required as pre-work, including reviewing an interactive online module on climate change published by the New England Journal of Medicine (NEJM).
- M3, all students: As part of the Family Medicine Core Rotation, students receive a lecture on Planetary Health that includes a discussion of extreme heat, health risks, and climate change both globally and locally.
- M4, all students: Since 2022, as part of the required core curriculum, all M4s in the Transition to Residency course receive a one-hour lecture on Climate Change and Human Health. This lecture discusses extreme heat, climate change, air pollution and associated health risks, including mental health effects, as well as climate justice, the carbon footprint of healthcare, and ways to make clinical practice more sustainable and/or get involved with advocacy.

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

Score Explanation:

- The longitudinal lecture series mentioned in section 1.2 covers extreme weather events as well, as follows:
- The Cardio-Pulmonary-Renal (CPR) block lecture titled "An Introduction to Planetary Health" includes a few slides on the impacts on extreme heat events on health. It briefly mentions other types of extreme weather events but does not go into detail.
- As part of the Cancer and Infectious Disease intersessions (50% of students), the required pre-work includes reviewing an interactive online module on climate change published by the New England Journal of Medicine, which discusses extreme weather events.
- The Family Medicine Core Rotation lecture on Planetary Health includes a discussion of extreme heat events, wildfires, and other extreme weather events.
- The M4 lecture on Climate Change and Human Health discusses extreme weather events and their effects.

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

Score Explanation:

- All students: the Transition to Residency course's lecture on Climate Change and Human Health has one slide on how changes in ecology due to climate change affect vector borne diseases, such as the increasing range of Lyme disease.
- The Infection Intersession has a full lecture on climate change and changing patterns of disease including vector-borne diseases, water-borne diseases, and harmful algal blooms. While this is in-depth, approximately 50% of students elect to take this intersession.
- The Cancer intersessions (50% of students) features an NEJM interactive online module with a section on infectious disease.

1.5. Does your <u>medical school</u> curriculum address the respiratory health effects of climate change and air pollution?
This topic was explored **in depth** by the **core** curriculum. (3 points)
This topic was **briefly** covered in the **core** curriculum. (2 points)
This topic was covered in **elective** coursework. (1 point)

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

Score Explanation:

- All lectures mentioned in 1.2 cover this topic, as follows, along with additional pulmonary lectures.
- The Family Medicine Core Rotation lecture presents a clinical case related to heat and respiratory illness before diving into wildfires, air pollution, and adaptation measures.
- The Transition to Residency course's lecture on Climate Change and Human Health has one slide on air pollution, and the lecturer discusses causes of air pollution and the health effects, focusing on the high mortality.
- In the Cancer and Infectious Disease intersessions, the NEJM interactive online module has a section on air pollution.
- In the core curriculum for preclinical students, during the Cardio-Pulmonary-Renal (CPR) block, a lecture titled "An Introduction to Planetary Health" includes a few slides on air pollution including effects on inhaled small particles on blood vessels, causes of death associated with air pollution, and well as the association between increased heat and ozone pollution. It is addressed as a learning objective within the lecture.
- Additionally, lectures on "COPD", "Interstitial Lung Disease", and "Asthma" all mention air pollution as a contributing factor for exacerbating symptoms.

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

Score Explanation:

- The lecture series covered in 1.2 addresses cardiovascular effects as follows:
- The M1 Cardio-Pulmonary-Renal (CPR) block lecture titled "An Introduction to Planetary Health" includes slides on cardiovascular response to heat events, for example detailing how vasodilatory effects of heat impact venous return and heart rate, and how this might exacerbate the risk of CV pathology.
- The Family Medicine Core Rotation lecture includes an in-depth discussion of the cardiovascular health effects of climate change including extreme heat, wildfires, and more.
- The Cancer and Infectious Disease intersessions (50% of students) NEJM interactive online module has a section on how climate change results in damaging cardiovascular effects.

1.7. Does your <u>medical school</u> curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score Explanation: ● The Transition to Residency course lecture on Climate Change and Human Health has one slide on the mental health effects of climate change, including a bullet point on neurotoxicants. ● As part of the Cognitive Intersession, M2 or M3 students receive a lecture on lead poisoning, which includes discussion of environmental degradation but does not incorporate climate change. Roughly 50% of students select this intersession.	

1.8. Does your <u>medical school</u> 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:	1
Score Explanation: ● The Infection Intersession, taken by 50% of each class, has a full lecture on climate change and changing patterns of disease including vector-borne diseases, water-borne diseases, and harmful algal blooms. ● In the Climate Change and Human Health elective, one out of the ten weeks in the course is dedicated to discussing food systems and climate change, and another week focuses on vector and waterborne disease, including discussion of water security and how severe weather events can threaten it. The elective also discusses ecosystem health in detail as part of the first week, which covers planetary health.	

1.9. Does your medical school curriculum address the outsized impact of climate change on marginalised populations such as those with low SES, women, communities of colour, Indigenous communities, children, homeless populations, and older adults?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score Explanation: ● The lecture series detailed in section 1.2 covers this material as follows: ● M1: The Cardio-Pulmonary-Renal (CPR) block lecture titled "An Introduction to Planetary Health" includes a learning objective and associated slides related to the disproportionate impact of climate change on marginalized communities and those related to environmental justice. The lecture covers redlining, environmental racism and its physiological consequences. The session specifically explored these topics using Portland, OR as a regional example and compared it regionally to other urban areas. ● M3: The Family Medicine Core rotation lecture includes a discussion of the unequal burden of climate change as it relates to three different clinical cases. It discusses increased vulnerabilities of all the populations listed above. It specifically discusses the impacts of historical redlining on urban heat islands in Portland, OR in the context of the recent heat waves in the Pacific Northwest and air pollution in the context of recent wildfires. ● M4: The Transition to Residency course lecture on Climate Change and Human Health has two slides on the unequal impacts of climate change and explains what climate justice is. It mentions marginalized populations based on poverty, occupation, health disparities, and specifically discusses the impacts of racism on this paradigm.	

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

- In the Cancer Intersession (taken by 50% of the student body), there is a brief discussion of climate justice and the unequal regional impacts of air pollution on airway cancers and respiratory-related deaths.
- In the Climate Change and Human Health elective, there is in-depth discussion of this topic through several assigned readings and lectures in week 1 (topic: planetary health and introduction to climate change) that specifically discuss OECD and non-OECD countries, including their carbon footprints and the effects of climate change on them.

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

1.11. Does your <u>medical school</u> curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides, microplastics)?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score Explanation: ● This topic is briefly mentioned in the core curriculum, on one slide in a lecture on infertility during the preclinical Developing Human didactic block that all M2s take. The slide has one bullet point that mentions environmental toxins as a cause of teratozoospermia.	

1.12. Does your <u>medical school</u> curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score Explanation: The lecture series outlined in section 1.2 covers environmental threats to the surrounding community as follows: ● M1: The Cardio-Pulmonary-Renal (CPR) lecture titled "An Introduction to Planetary Health" covers redlining, environmental racism, and its physiological consequences. The	

session specifically explores these topics using Portland, OR as a regional example and compares it regionally to other urban areas. It also touches upon the impact of recent local extreme weather events such as the 2020 wildfires and the 2021 heat dome in Portland and the Pacific NW.

- M1: Also in the Cardio-Pulmonary-Renal (CPR) block, a Pulmonary Pharmacology lecture has a few slides focusing on asthma, showing maps of the local area, and discussing links between asthma and freeways.
- M3: In the Family Medicine Core Rotation lecture, there is an in-depth discussion of human-caused environmental effects on the local Portland and Oregon community such as extreme heat events, wildfires and air quality, algal blooms, etc.
- M4: The Transition to Residency lecture on Climate Change and Human Health includes a slide on air pollution. The lecturer discusses local wildfires that have affected local air quality levels during the past few years.

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

Score Explanation:

- In the Climate Change and Human Health elective, week 1 includes a lecture and panel discussion with guests from Health in Harmony. This nonprofit international organization focuses on rainforest communities and uses their Indigenous knowledge and expertise about the rainforest to drive climate solutions.
- A medical school-specific elective on American Indigenous and Alaska Native Health features course content from and discussion around Indigenous perspectives on land and activism, including traditional ways of using land. For example, there is a required Native American Health Seminar series talk by Tara Houska, J.D. entitled “Climate, Identity, and our Health: Indigenous Lessons and Voice from the Front Lines to Prevent Climate Collapse.” 15 to 20 medical students per class take this elective.

1.14. Does your <u>medical school</u> curriculum address the outsized impact of anthropogenic environmental toxins on marginalised populations such as those with low SES, women, communities of colour, children, homeless populations, Indigenous populations, and older adults?
This topic was explored **in depth** by the **core** curriculum. (3 points)
This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score Explanation: ● The lecture series outlined in section 1.2 covers this material as follows: ● The Cardio-Pulmonary-Renal (CPR) block lecture titled "An Introduction to Planetary Health" includes a section on Environmental Justice, explaining how climate change exacerbates existing health disparities and vulnerabilities. This section includes topics of outsized impacts on BIPOC and low-income communities, environmental sacrifice zones, environmental racism, and climate gentrification. ● The Family Medicine Core Rotation lecture includes a discussion of urban heat islands, unequal air pollution exposure, and their resulting health consequences. ● The Transition to Residency lecture on Climate Change and Human Health has two slides on Climate Justice, discussing the inequitable impacts of aspects of climate change such as pollution and displacement. ● Additionally, a required Clinical Skills Lab during the preclinical curriculum features a session on Race, Ethnicity, and Religion which discusses how the overwhelming majority of health disparities are accounted for by differences in socioeconomic opportunities and avoidance of environmental toxins.	

Curriculum: Sustainability

1.15. Does your <u>medical school</u> 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
Score Explanation: ● In the Developing Human block of the preclinical curriculum, a lecture entitled "Nutrition for Wellness" includes discussion of a healthy diet including plant-based proteins, but did not specify any environmental benefits of such a diet. ● The Transition to Residency lecture on Climate Change and Human Health has one slide on promoting a plant-based diet, and a bullet point describing the co-benefits for cardiovascular health and the environment. There is an attached figure showing the carbon footprint for various food items (types of meat, eggs, plants, etc.). ● The Climate Change and Human Health elective includes an intensive exploration of the planetary health diet and the impact of food production on planetary resources.	

1.16. Does your medical school curriculum address the carbon footprint of healthcare systems?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score Explanation: ● The Family Medicine Core Rotation planetary health lecture discusses the carbon footprint of healthcare systems, how we can build more sustainable health care systems, and some adaptations to clinical practice to create a greener clinic space. ● The Transition to Residency lecture on Climate Change and Human Health has two slides on how healthcare contributes to carbon emissions, including discussion of different aspects (travel, delivery, anesthetic gasses, etc.).	

1.17. Does your medical school curriculum cover these components of sustainable clinical practice in the core curriculum? (points for each)	**Score**
The health **and** environmental **co-benefits** of **avoiding** over-medicalisation, over-investigation and/or over-treatment (2 points)	1
The environmental impact of **pharmaceuticals** and over-prescribing as a cause of climate health harm. Alternatively teaching on **deprescribing** where possible and its environmental and health co-benefits would fulfil this metric. (2 points) .	0
The health **and** environmental **co-benefits** of **non-pharmaceutical management** of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK. (1 point)	1
Environmental impact of **surgical** healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	0
The impact of **anaesthetic** gases on the healthcare carbon footprint and ways to reduce anesthesia'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

Score Explanation:

- The Family Medicine Core rotation lecture discusses the environmental benefits of non-pharmaceutical management of conditions such as exercise, yoga, etc. and it also discusses reducing excessive healthcare utilization in general. The health benefits of both avoiding over-medicalization, healthcare utilization, and non-pharmaceutical training is addressed more in-depth throughout the didactic curriculum.
- The Transition to Residency lecture on Climate Change and Human Health has a few slides on adapting clinical practice, with the main one discussing "green medications" such as metered dose inhalers, "green" anesthesia, reduction of waste, evidence-based PPE usage, "green procedures", and preventive medicine such as effective chronic disease management in a primary care setting.
- Throughout the curriculum, there is an emphasis on deprescribing where possible and avoiding over-medicalization or over-investigation, such as with a Choosing Wisely course. However, these generally discuss the health benefits of such actions without any mention of environmental benefit.

Curriculum: Clinical Applications

1.18. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies to have conversations with patients about the health effects of climate change?	
Yes, there are strategies introduced for having conversations with patients about climate change in the **core** curriculum. (2 points)	
Yes, there are strategies introduced for having conversations with patients about climate change in **elective** coursework. (1 point)	
No, there are **not** strategies introduced for having conversations with patients about climate change. (0 points)	
Score Assigned:	2

Score Explanation:

- During M1 "An Introduction to Planetary Health" lecture, strategies on communicating to patients regarding the impacts of climate change were explored using a case-based framework. Examples of these recommendations (in the context of an extreme heat event) include improving adaptive capacity, adequate hydration and potentially skin wetting, and options for reducing exposure such as fans or cooling centers. The lecture details clinically relevant questions that could be explored during an encounter such as "do the windows in your home close tightly?"
- The Transition to Residency lecture on Climate Change and Human Health has one slide on how to protect vulnerable patients, which mentions discussing heat safety, air conditioning, hazardous air quality (particularly for patients with asthma and COPD), and planning for natural disasters with patients. The lecture provides students with a direct link to an American College of Physicians Climate Change toolkit with education on how to talk to patients.
- Similar information is covered in the Family Medicine Core rotation lecture and the Interdisciplinary Climate Change and Human Health elective.

1.19. In training for patient encounters, does your medical school's 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:	1
Score Explanation: ● The required Clinical Skills Labs in which all students learn history taking skills do not include strategies for taking an environmental history. ● The Climate Change and Human Health elective (described in question 1) has a week dedicated to Communication, in which there is a 25-minute lecture on how to take a clinical environmental and exposure history. ● The M1 Cardio-Pulmonary-Renal (CPR) block lecture entitled "An Introduction to Planetary Health" includes an interactive session where students assess a case of an older adult with complex medical history anticipating a forecasted heat wave. While the lecture provides some strategies on exploring a climate health history (heat-exposure specific), strategies on taking a broader climate-related history are not explored.	

Curriculum: Administrative Support for Planetary Health

1.20. Is your medical school currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?	
Yes, the medical school is currently in the process of making **major** improvements to ESH/planetary health education. (4 points)	
Yes, the medical school is currently in the process of making **minor** improvements to ESH/planetary health education. (2 points)	
No, there are **no** improvements to planetary health education in progress. (0 points)	
Score Assigned:	4
Score Explanation: ● Medical students and faculty collaborate on a monthly meeting discussing planetary health and the undergrad curriculum, known as the Climate Change Curricula and Education taskforce. This committee is dedicated to the long-term project of integrating longitudinal climate education throughout the didactic and clinical phases, building upon existing materials in conjunction with the OHSU Climate Health and Education Taskforce. ● In 2023, a medical student successfully advocated for the addition of a lecture into the core didactic curricula titled "Introduction to Planetary Health" during the Cardiology, Pulmonary, Renal Block and led the session alongside two faculty members.	

- The Climate Change Curricula and Education taskforce is part of the larger OHSU Sustainability Steering Committee.
- Recent additions to the curriculum include incorporating standalone lectures on Climate Change into the Infectious Disease, Cognitive Impairment, and Cancer intersessions (all medical students take two intersessions, at least 50% of M2s will take one of these three, as described in prior questions) and into the required Transition to Residency course taken by all M4s.
- 2021: a new elective, Climate Change and Human Health, which is interdisciplinary and offered to all students, including medical students.
- 2022: the committee created a lecture for the Family Medicine Core Rotation (required, all students).
- Student interest is also driving planetary health education. OHSU Students for a Sustainable Future organize optional talks such as panels on environmental health.

1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> curriculum?	
Planetary health/ESH topics are **well integrated** into the core medical school curriculum. (6 points)	
Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum. (4 points)	
Planetary health/ESH is not integrated and is primarily addressed in **(a) standalone lecture(s).** (2 points)	
There is **minimal/no** education for sustainable healthcare. (0 points)	
Score Assigned:	4

Score Explanation:
- Due to strides made within the last few years, certain topics such as extreme heat exposure, air pollution/wildfires, infectious disease, and waste produced by the health sector have been incorporated more thoroughly throughout the core curriculum.
- This includes brief mention in first-year lectures followed by more robust exploration in the Family Medicine core and the Transition to Residency course.
- There are currently three full lectures guaranteed to reach *all* medical students (M1, M2, and M4), with a fourth reaching at least half of the student body.
- There are some faculty members who independently explore climate related factors and how they impact physiology in their lectures; for example the pulmonary pathology lecturer explores air pollution as an exacerbating factor for chronic lung disease. This is not a coordinated or integrated effort, however.

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:	0
Score Explanation: OHSU as an institution has a Climate Change Curricula and Education taskforce that has been making changes as described in question 20. Faculty who have been on this taskforce have been incorporating planetary health into the curriculum, but on a voluntary basis. No faculty members are specifically employed to oversee this work.	

1.23. Does your health professional curriculum include teaching on civic engagement/advocacy to address the environmental and structural determinants of health?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score Explanation: The curriculum does discuss this, albeit briefly. Since 2022, as part of the required core curriculum, all M4s in their Transition to Residency course receive a one-hour lecture on Climate Change and Human Health. This lecture specifically discusses ways to get involved in advocacy.	

Section Total (55 out of 75)	**73.33%**

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Interdisciplinary Research

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

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your institution?	
Yes, there are faculty members at the **institution** who have a **primary** research focus in planetary health **or** sustainable healthcare/vetcare. (3 points)	
Yes, there are individual faculty members at the **institution** who are conducting research **related** to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points)	
There are sustainability researchers at the **institution**, but not specifically associated with healthcare/vetcare. (1 point)	
No, there are **no** planetary health and/or sustainability researchers at the **institution** at this time. (0 points)	
Score Assigned:	3
Score Explanation: OHSU has researchers working on healthcare sustainability. Some have primary research that focuses on sustainability and climate change, including: ● Dr. Alexander Domingo, a family medicine physician. Dr. Domingo has supervised multiple students researching and implementing planetary health education at OHSU. ● Charlotte Roscoe is an environmental epidemiologist who holds positions at the OHSU-PSU School of Public Health, as well as the Knight Cancer Institute, and Division of Oncological Sciences in the School of Medicine. Her lab is adding climate-related exposure variables to the Healthy Oregon Project (HOP) cohort study to investigate impacts across the cancer continuum. Her group are also exploring climate co-benefits of Green Care for health equity. ● Some faculty hold positions in both the school of medicine and elsewhere. There are many others conducting research on planetary health at OHSU, but are not directly connected to the medical school, or do not have planetary health as their primary focus. Medical students are able to work with any of these people on projects. Areas of research include environmental toxins, industrial practices, and exposure to pollutants and poor air quality. Examples include scientists who study water quality and regional environmental health issues like	

algal blooms, and a scientist at the Oregon Institute of Occupational Health Sciences at OHSU who studies transcriptional regulation and epigenetic patterning in response to environmental stressors with a focus on chemical pollutants. In 2025, OHSU's Developmental Brain Imaging Lab published a study on air pollution and its associations with structural changes in the adolescent brain. Through a more quality improvement approach, Dr. Hatfield, an obstetrician and gynecologist, has published research in sustainability related publications over the past three years, and is currently working on sustainability practices in the operating room.

2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution?	
There is **at least one** dedicated department or institute for interdisciplinary planetary health research. (3 points)	
There is **not currently** a department or institute for interdisciplinary planetary health research, but there are **plans** to open one in the next 3 years. (2 points)	
There is an **Occupational and Environmental Health department**, but no interdisciplinary department or institute for planetary health research. (1 point)	
There is **no** dedicated department or institute. (0 points)	
Score Assigned:	3
Score Explanation: The Center for Primary Care Research and Innovation has recently launched the Primary Care Climate Change and Health Program that promotes research, policy and advocacy, and multidisciplinary education. This center, headed by OHSU physicians and faculty, works to establish a network of climate and health focused researchers and medical providers to build climate change resilience within our local communities to help mitigate the health effects of climate change. While this center and proposed program is not an official department of OHSU, it is closely affiliated and has plans to serve as a center for interdisciplinary planetary health research at OHSU and beyond. OHSU is also home to the Oregon Institute of Occupational Health Sciences. This institute does include research into planetary health, but is primarily focused on occupational exposures and workplace safety.	

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:	0
Score explanation: Per the Senior Associate Dean of Research at OHSU, there is no such process.	

2.4. Does your <u>institution</u> 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:	1
Score Explanation: Through the Center for Primary Care Research and Innovation, there is a web page regarding research and education surrounding climate change at OHSU, This website is limited in what it includes and efforts are currently underway to create a more comprehensive, centralized website detailing ongoing and past research and efforts related to health and the environment.	

2.5. Has your <u>institution</u> recently hosted a conference or symposium on topics related to planetary health?
Yes, the **institution** has hosted at least one conference or symposium on topics related to planetary health in the past year. (4 points)

Yes, the **institution** has hosted at least one conference or symposium on topics related to sustainable healthcare/vetcare in the past year. (3 points)	
Yes, the **institution** has hosted a conference on topics related to planetary health / sustainable healthcare/vetcare in the past three years. (2 points)	
The **institution** has not hosted any conferences directly, but they have provided financial support for a local planetary health event. (1 point)	
No, the **institution** has not hosted a conference on topics related to planetary health in the past three years. (0 points)	
Score Assigned:	0
Score Explanation: In April 2022 OHSU hosted the "Social and Environmental Exposures and the Developmental Origins of Health Disparities" conference (brought to us by the Harvard T.H. Chan School of Public Health), bringing together social and environmental scientists interested in the interrelationships between social and environmental factors and their joint impact on health and wellbeing. The medical school has not hosted or funded any such events since then.	

2.6. Is your <u>institution</u> a member of a national or international planetary health or ESH/ESV organisation?	
Yes, the institution is a member of a national or international planetary health **or** ESH/ESV organisation. (1 point)	
No, the institution is **not** a member of such an organisation. (0 points)	
Score Assigned:	1
Score Explanation: OHSU SOM is a member of the Global Consortium on Climate and Health Education.	

Section Total (8 out of 17)	**47.06%**

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Community Outreach and Advocacy

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

3.1. Does your institution partner with community organisations to promote planetary and health?	
Yes, the **institution** meaningfully partners with **multiple** community organisations to promote planetary and environmental health. (3 points)	
Yes, the **institution** meaningfully partners with **one** community organisation to promote planetary and environmental health. (2 points)	
The **institution** does not partner with community organisations, but participates in community focused events relating to planetary health. (1 point)	
No, there is **no** such meaningful community partnership. (0 points)	
Score Assigned:	2
Score Explanation: OHSU partners with Health Care Without Harm, which tracks and supports the school's efforts to source fair-trade, organic, sustainable, and locally grown products. This is institution-wide, not specific to the SOM, but the SOM is included. ● OHSU Students for a Sustainable Future partnered with the Oregon Chapter of Food & Water Watch to educate students about a proposed mega-dairy and promote advocacy efforts. ● A Health in Harmony-produced global and planetary health lecture is a regular part of the OHSU SOM elective course on Climate Change and Human Health, but this is not directed at the community. Their online module on Planetary Health is approved as a CE credit.	

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:	1

Score Explanation:

- While OHSU has offered lectures in the past, some of these courses were not offered recently, and have catered more towards students/ staff than community members.
- OHSU and Portland State University (PSU) SPH hosted a public event in February 2021 called "Climate Change in Oregon: A Public Health Emergency" that was open and free to the public. It discussed how climate change impacts physical and mental health and solutions to implement to fight climate change and improve public health and social justice.
- The Oregon Institute of Occupational Health Sciences provides educational opportunities open to the community in the form of courses, symposia, and seminars. These courses and events focus on occupational health, safety, and wellbeing; planetary health education has played a key role in this in the past: during the 2020-2021 seminar series, multiple seminars focused on planetary health, including land use and pollution, pollutants and weight gain, stress and the environment, health equity on a warming planet, environmental factors on diversity and equity, and combustion emissions and cancer risk. While these seminars are open to the community, however, they are targeted towards occupational practitioners, not the lay public.
- Portland Clean Energy Fund has partnered with OHSU in the past and will likely be presenting at future Family Medicine lectures, however these two are not currently directed toward the community. Additionally, a resident in the Department of Psychiatry Education and Training has partnered with OPAL (Organizing People/Activating Leaders) Environmental Justice to exchange lectures on climate change, mental health, and environmental justice but these, too, are lectures directed at students, not the community. This is also the case with OHSU's partnership with Coalition for Communities of Color, in which a representative specializing on Climate Justice has a recurring part in the IPE course.

3.3. Does your <u>institution</u> have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?
Yes, all students **regularly** receive communication updates dedicated to planetary health and/or sustainable healthcare. (2 points)
Yes, planetary health and/or sustainable healthcare topics are regularly included in communication updates to **some courses**. (1 point)

Students **do not** receive communications about planetary health or sustainable healthcare. (0 points)	
Score Assigned:	1
Score Explanation: While there is no regular communication about planetary health and/or sustainable healthcare topics, OHSU sends out daily emails ("OHSU Now") with occasional articles on things like the Primary Care Climate Change and Health Program or the new efforts of a task force aimed at improving sustainability at the institution.	

3.4. Does the <u>institution</u> or <u>main affiliated hospital trust</u> engage in professional education activities targeting individuals post-graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare remain up to date during their professional career?	
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
Score Explanation: The institution offers no specific coursework for post-graduate providers, but does endorse multiple grand rounds, Occupational Health courses incorporating planetary health, and other planetary health education for CME credit. The Oregon Institute of Occupational Health Sciences offers regular courses and seminars on occupational health. These are open to post-graduate providers and often incorporate planetary health and sustainability. They are not, however, specifically targeted to planetary health, instead discussing planetary health from the occupational health perspective. In May 2021 they held a symposium called "Adapting to Climate Change for Worker Safety, Health, and Well-being" and the recording remains available online. Over the past few years there have been a handful of Grand Rounds eligible for CME credit that have focused on effects of climate change on health.	

3.5. Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> 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:	0
Score Explanation: To our knowledge, there are no readily accessible educational materials for patients regarding environmental health exposures.	

3.6. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about the health impacts of climate change?	
Yes, the **institution** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	0
Score Explanation: Some individual physicians cover climate change and health impact topics during their appointments (such as providing a handout on the Planetary Health diet to patients), but this is on an individual basis. Educational material is not regularly provided or made accessible to patients on an institutional level. There are no readily accessible educational materials for patients regarding environmental health exposures on OHSU's website.	

Section Total (5 out of 14)	**35.71%**

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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
Score Explanation: There is no specific QI project requirement in the core curriculum. There is, however, a general Scholarly Project requirement (to be completed by graduation). This can be fulfilled by nearly any type of project, ranging from QI to clinical research to community outreach. As such, a student pursuing a sustainability initiative for Scholarly Project will be supported, and can apply for general funding available to students (i.e. Student Senate funding).	

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

Score Explanation: There are no specific research programs or fellowships for students interested in Planetary Health, but there are faculty in the School of Medicine who participate in this kind of research, several of whom have been consistent in welcoming medical students to their projects. Students can reach out for mentorship and research on their own initiative.

4.3. Does the <u>institution</u> have a webpage where students can find specific information related to planetary health and/or sustainable healthcare/vetcare activities and mentors within the institution? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.	
The institution has a webpage with specific information related to planetary health or sustainable healthcare/vetcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. (2 points)	
There is an institution webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the 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
Score Explanation: The websites for the Primary Care Climate Change and Health Program includes a tab titled “research” that includes the abstracts for a few ongoing studies with links to the official biographies of the PIs, but there is no contact information and it is not comprehensive.	

4.4. Does your <u>institution</u> have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?	
Yes, there is a student organisation **with faculty support** at my institution dedicated to planetary health or sustainability in healthcare. (2 points)	
Yes, there is a student organisation at my institution dedicated to planetary health or sustainability in healthcare but it **lacks faculty support.** (1 point)	
No, there is **not** a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points)	
Score Assigned:	2
Score Explanation:	

OHSU's chapter of Students for a Sustainable Future (S4SF) is a student group aimed at increasing interest in and knowledge of the relationship between planetary and human health. It is the local chapter of Medical Students for a Sustainable Future. The group receives faculty support, including a faculty advisor and a close relationship with the faculty-led Climate Education and Curriculum Taskforce. The group is involved in many longitudinal sustainability initiatives including divestment, the PHRC, and an environmental justice journal club.

4.5. Is there a student liaison representing sustainability interests who serves on a <u>department or institutional</u> decision-making council to advocate for curriculum reform and/or sustainability best practices?	
Yes, there is a student representative who serves on a department or institutional decision-making council/committee. (1 point)	
No, there is no such student representative. (0 points)	
Score Assigned:	1
Score Explanation: The OHSU Climate Curriculum and Education Taskforce encourages student representatives to join their meetings. While there is not a single student that attends these meetings, there is a rotating group of students who attend and provide a student voice to discussions around strategic planning, curriculum reform, and sustainability goals for the school. Students were also recently invited to take part in an interview with a new task force aimed at improving sustainability at the institution. Approx 30 students participated.	

4.6. In the past year, has the <u>institution</u> had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	**Score**
Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.	1
Panels, speaker series, or similar events related to planetary health that have students as an intended audience.	0
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.	1
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1
Score Explanation: The OHSU S4SF chapter hosts events during required enrichment weeks for preclinical students and an environmental justice journal club. This past year there were multiple volunteer opportunities organized including river cleans-ups and volunteer days at a local sustainable agriculture farm. There are also a variety of other interest groups and clubs (ex: Wilderness Medicine Interest Group, Fly Fishing Interest Group, OHSU Climbing Club) that host events encouraging students to get outdoors.	

Section Total (9 out of 15)	**60%**

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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:	1
Score explanation: OHSU does boast a sustainability taskforce; there are no salaried staff or full-time staff members dedicated to this cause.	

5.2. How ambitious is your institution's plan to reduce its own carbon footprint?	
The institution has a **written and approved plan** to achieve carbon neutrality by **2030** (5 points)	
The institution has a **written and approved plan** to achieve carbon neutrality by **2040** (3 points)	
The institution has a stated goal of carbon neutrality by **2040** but has **not created a plan** to reach that goal or the **plan is inadequate** (1 point)	
The institution does **not** meet any of the requirements listed above (0 points)	
Score Assigned:	0

Score Explanation:
In November 2022, OHSU signed the White House/Health and Human Services Health Sector Climate Pledge, pledging to reduce organizational carbon emissions by 50% by 2030 and to achieve net-zero carbon emissions by *2050* rather than 2040. Greg Moawad, OHSU's Vice President of Campus Services, was designated as the executive-level lead for the Climate Pledge. Through energy efficiency projects and a partnership with Portland General Electric to buy carbon-free electricity, OHSU is nominally on track to reduce carbon emissions by 50% by 2030. No recent updates to this project have been published.

Additionally, a Climate Resilience Plan was developed to anticipate the needs of community groups that are disproportionately at risk of climate-related harm. The initial summary was released to the OHSU community in December 2023. An inventory of Scope 3 (supply chain) emissions, as well as a long-term decarbonization plan, was completed in 2024.

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:	2

Score Explanation:
Per a report, in 2019 OHSU partnered with Portland General Electric and other customers to build Pachwaywit FIelds, a 162-megawatt solar and battery facility in Oregon which opened in 2022. In 2023, OHSU projected to purchase 87% of its power from carbon-free sources and offset 3% of emissions from power through solar offsets. OHSU is on track to buy 100% of its power from PGE's carbon-free renewable resources by 2035.

The above information was retrieved from the this documentation.

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

Yes, sustainable building practices are utilised for new buildings on the institution's campus and the **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)	
Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have **not been retrofitted.** (2 points)	
Sustainable building practices are **inadequately or incompletely** implemented for new buildings. (1 point)	
Sustainability is **not considered** in the construction of new buildings. (0 points)	
Score Assigned:	2

Score Explanation:

OHSU is designing and constructing all new buildings to aim for LEED Gold certification.

o The Knight Cancer Research Building was LEED Platinum certified on April 4, 2019.
o The Center for Health and Healing 2 (CHH2) was LEED Gold certified on July 8, 2019.
o The Elk's Children's Eye Clinic was LEED Gold certified on April 22, 2022.
o The OHSU Inpatient Addition is on-track for LEED Silver certification.
o The Doernbecher Children's Hospital Addition is in design for LEED Gold.

The above information was retrieved from the following documentation and websites:

- Campus Development Planning & Design Overview
- OHSU Knight Cancer Research Building
- OHSU Centre for Health and Healing

The LEED certification status of the OHSU Inpatient Addition and the Doernbecher Children's Hospital Addition was obtained through direct inquiry with the Facilities Management Administration at OHSU.

5.5. Has the institution implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?
Yes, the institution has implemented strategies to encourage and provide **environmentally-friendly transportation options** such as safe active transport, public transport, or carpooling and these options are well-utilised by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default. (2 points)
The institution has implemented **some** strategies to provide environmentally-friendly transportation options, but the options are **unsatisfactorily** accessible or advertised. (1 point)
The institution has **not** implemented strategies to encourage and provide environmentally-friendly transportation options. (0 points)

Score Assigned:	2

Score Explanation:
OHSU has currently implemented multiple strategies including alternative commuting incentives (ex: $1.50/day for every bike commute), organizing the "largest bike parking lot" and valet (Go By Bike) for students and employees that also offers repairs and tune-ups, including bike infrastructure in building design, and providing free or discounted public transportation options for students and faculty. OHSU also received the Outstanding Transportation Demand Management Strategy Award from Association for Commuter Transportation at its 39th Annual International Conference for its comprehensive bike program. Managed by Campus Access and Commute Services in partnership with Go By Bike, the initiative advanced planetary health by reducing emissions and parking demand while promoting active transportation through incentives, bike access, secure parking, and education. Additionally, the Portland Aerial Tram provides a critical connection between OHSU's South Waterfront campus and the Marquam Hill campus, enabling patients, providers, and staff to travel efficiently between the two locations while reducing reliance on personal vehicles.

The above information was retrieved from the following documentation and websites:

- Accolades: Awards, honors and appointments August
- Portland Aerial Tram for commuters

5.6. Does your institution have an organics recycling program (compost) and a conventional recycling program (aluminium/paper/plastic/glass)?

Yes, the institution has **both** compost **and** recycling programs accessible to students and faculty. (2 points)

The institution has **either** recycling **or** compost programs accessible to students and faculty, but not both. (1 point)

There is **no** compost or recycling program at the institution. (0 points)

Score Assigned:	2

Score Explanation:
OHSU offers composting and recycling in all buildings. As part of its composting program, OHSU composts approx. 200,000 pounds of food waste each year.· Despite the challenges of the rapidly changing recycling market, OHSU continues to increase its recycling rate, diverting 26% of solid waste from the landfills. By recycling single-use medical devices for reuse, OHSU diverted 18,000 pounds of waste from the landfill.

The above information was obtained through direct inquiry with the Facilities Management Administration at OHSU.

5.7. Does the institution apply sustainability criteria when making decisions about the campus

food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?	
Yes, the institution has **adequate s**ustainability requirements for food and beverages, including meat-free days or no red-meat, and **is engaged** in efforts to increase food and beverage sustainability. (3 points)	
There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution **is engaged** in efforts to increase food and beverage sustainability. (2 points)	
There are sustainability guidelines for food and beverages, but they are **insufficient or optional.** The institution is **not** engaged in efforts to increase food and beverage sustainability. (1 point)	
There are **no** sustainability guidelines for food and beverages. (0 points)	
Score Assigned:	2
Score Explanation: 50% of the meat purchased by OHSU is locally raised without the use of sub-therapeutic antibiotics and 15% of produce is locally grown. A regular onsite farmers market on campus also provides sustainable food options for patients, visitors and staff. That being said, there are no "meat-free days" and there is significant room for improvement. The above information was retrieved from the following websites: • Farmers Market • Food and Nutrition Services - Sustainability	

5.8. Does the institution apply sustainability criteria when making decisions about supply procurement?	
Yes, the institution has **adequate** sustainability requirements for supply procurement **and** is **engaged** in efforts to increase sustainability of procurement. (3 points)	
There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **engaged** in efforts to increase sustainability of procurement. (2 points)	
There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **not engaged** in efforts to increase sustainability of procurement. (1 point)	
There are **no** sustainability guidelines for supply procurement. (0 points)	
Score Assigned:	2
Score Explanation: There is a "Commitment to Sustainable Solid Waste Management, Reduction and Recycling" document that went into effect on 10/22/2010 where there is a bullet point for "environmentally preferable purchasing" that says: "The procurement of goods and services that have a reduced	

impact on human health and the environment as compared to other goods and services servicing the same people." There are a number of individuals working to improve the sustainability of utilized supplies. The above information was retrieved from the following internal website, full text available on request here.

5.9. Are there sustainability requirements or guidelines for events hosted at the institution?	
Every event hosted at the institution **must** abide by sustainability criteria. (2 points)	
The institution **strongly recommends or incentivizes** sustainability measures, but they are **not required.** (1 point)	
There are **no** sustainability guidelines for institution events. (0 points)	
Score Assigned:	0
Score Explanation: OHSU does not have any sustainability requirements for events that planners must meet.	

5.10. Does your institution have programs and initiatives to assist with making lab spaces more environmentally sustainable?	
Yes, the institution has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable. (2 points)	
There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)	
There are **no** efforts at the institution to make lab spaces more sustainable. (0 points)	
Score Assigned:	0
Score explanation: We did not find any evidence of efforts to make medical school lab spaces more sustainable.	

5.11. Does your institution's endowment portfolio investments include fossil-fuel companies?
The institution is **entirely divested** from fossil fuels **and** has made a **commitment to reinvest divested funds** into renewable energy companies or renewable energy campus initiatives. (4 points)
The institution is **entirely divested** from fossil fuels. (3 points)

The institution has **partially divested** from fossil fuel companies **or** has made a **commitment to fully divest**, but **currently** still has fossil fuel investments. (2 points)	
The institution has **not divested** from fossil-fuel companies, but faculty and/or students are **conducting organised advocacy** for divestment. (1 point)	
Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to change that. (0 points)	
Score Assigned:	2
Score Explanation: OHSU incorporates environmental, social and governance (ESG) considerations into its long-term investment strategy; as of March 2022, ESG investments total $890 million or 63% of university-held investment assets. OHSU utilizes investment strategies and managers that encourage corporations to reduce carbon footprints by explicitly incorporating ESG scoring in their investment evaluation process. Companies are also evaluated by emissions, resource management, and risk management. The above information was retrieved from the this documentation.	

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

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	(55/75) x 100 = 73.33%	B
Interdisciplinary Research (17.5%)	(8/17) x 100 = 47.06%	C
Community Outreach and Advocacy (17.5%)	(5/14) x 100 = 35.71%	D+
Support for Student-led Planetary Health Initiatives (17.5%)	(9/15) x 100= 60%	B-
Campus Sustainability (17.5%)	(15/32) x 100 = 46.88%	C
Institutional Grade	**(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 55.19%**	C+