

# Planetary Health Report Card (Occupational Therapy): University of British Columbia



### THE UNIVERSITY OF BRITISH COLUMBIA

2024-2025 Contributing Team:

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Land acknowledgment:

The University of British Columbia's (UBC) Master of Occupational Therapy (MOT) program is facilitated at three distributed sites across British Columbia, Canada. We acknowledge that we live, work, learn, and play on the unceded territory of the following First Nations:

- Northern Cohort (Prince George): Lheidli T'enneh
- Fraser Cohort (Surrey): Hul'qumi'num Treaty Group, Á,LENENE¢ ŁTE (WSÁNEĆ), Stó:lō, Stz'uminus, scowaθena?ł tomoxw (Tsawwassen), scooliga?ł tomoxw (Katzie), Semiahmoo, qwa:ńλôn (Kwantlen), kwikwoźom (Kwikwetlem)
- Vancouver Cohort: šx<sup>w</sup>məθk<sup>w</sup>əýəma?ł təməx<sup>w</sup> (Musqueam), Skwxwú7mesh

Úxwumixw (Squamish), Stz'uminus, Səlilwətał (Tsleil-Waututh)

Since time immemorial these First Nations have stewarded these lands and have a deep connection to them. We recognise colonialism as a cause of climate change, and Indigenous knowledge being integral to understanding and combating the impacts of climate change.

### **Summary of Findings**

**B-**

F

**A**+

A

**A-**

#### **Overall Grade**

#### Curriculum

- The University of British Columbia's Master of Occupational Therapy program has begun a formal process of implementing planetary health content into the curriculum. One lecture titled "Occupational Therapy, Climate Change, Planetary and Human Health" was introduced into the curriculum prior to the assessment period of this report and educated students on important topics including the impact of climate change on human health, the importance of practicing sustainable healthcare, and opportunities for occupational therapists to engage in climate action.
- **Recommendations:** We suggest that content on the impact of climate change on human health and occupations be integrated longitudinally throughout the occupational therapy curriculum. As well, ensure students are educated on the role of occupational therapists in advocating for more sustainable workplaces and provision of sustainable occupational therapy services.

#### **Interdisciplinary Research**

- The University of British Columbia has a host of planetary health and sustainability research initiatives including an interdisciplinary group of researchers focused on addressing planetary health and healthcare sustainability, as well as the Climate Change and Planetary Health Initiative which publishes feature articles that showcase the research and researcher's narratives. Additionally, the UBC Continuing Professional Development unit and Climate Solutions Research Collective within the Faculty of Medicine has hosted a full day conference about addressing planetary health as health professionals.
- **Recommendations**: We encourage UBC and the Occupational Science and Occupational Therapy departments to develop policies regarding the processes by which feedback from communities disproportionately impacted by climate change and environmental injustice to give input or make decisions about the research agenda that is accessible, equitable, and sustainable.

#### **Community Outreach and Advocacy**

- The University of British Columbia has multiple groups, both student-led and staffed to promote climate change awareness and educational outreach to students, faculty, and members of the community. In addition, during the evaluated period, there was one climate change-related course for further education for UBC alumni. Resources for patients regarding climate change and health exposures and impacts are available at affiliated teaching sites where occupational therapy students learn.
- **Recommendations:** More opportunities for students to have placements at community partners that focus on planetary health, more public-facing events, further education, and patient resources that link occupational therapy and planetary health.

#### Support for Student-Led Initiatives

- UBC offers many opportunities for students to engage in sustainability and planetary health initiatives. Some opportunities include grants for student-led research projects, exploration alongside sustainability researchers, and participation in Medical School student clubs dedicated to advocacy and engagement with planetary healthcare.
- **Recommendations**: Current support for student-led initiatives within UBC engages with sustainability more broadly and would benefit from a more explicit focus on planetary healthcare. While the occupational therapy program is small scale at this time and implementing more student opportunities may not be feasible, we recommend that they partner with the medical school to offer increased support to students interested in sustainable initiatives.

Campus Sustainability	В
<ul> <li>UBC's Vancouver campus has made many good steps towards creating a more sustainable camp have made many realistic and time-bound commitments to improving sustainability campus-wide Particular strengths include UBC's robust network of sustainability offices and initiatives, from Sustainability office to the UBC Farm, and the overarching Campus as a Living Lab initiative.</li> <li>Recommendations: The key focus for UBC's campus sustainability should be to uphold the comade by the university. UBC is a leader in institutional sustainability in Canada, much of which possible through UBC Sustainability and the Campus as a Living Lab initiative. Many positive climate-related policies are in place or have been planned; however care is needed to ensure the are enacted to the fullest extent. Of particular interest are UBC's goal of achieving carbon neutr 2035 and fully divesting the endowment fund from fossil fuels by 2030. Upholding these comm be essential to UBC's campus sustainability. We also recommend making sustainability guidelir campus food, resource procurement, and event planning into mandatory policies.</li> </ul>	ous. They de. the UBC mmitments is made se policies ality by itments will nes for

### **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 occupational therapy schools' institutional priorities do not reflect the urgency of this danger to human health.

As future health professionals, we must be prepared to address the impacts of human-caused environmental changes on our patients' health. This preparation is in the hands of the institutions providing our occupational therapy training. It is imperative that we hold our institutions accountable for educating occupational therapy 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) broader institution 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 healthcare school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term "planetary health" to satisfy the metric.
- Sustainable Healthcare: As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.
- Education for Sustainable Healthcare (ESH): is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the 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.
- Occupational Therapy School/Department vs. Institution: When "school" is specified in the report card, this only refers to curriculum and resources offered by the School/department of Occupational Therapy 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 occupational therapy students, no matter where in the institution the resource comes from or if it is specifically targeted for occupational therapy students, can meet this metric.

- Elective: The word "elective" refers to an optional course or lecture series that a student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- **Core Curriculum:** This refers to taught material that is delivered to the entire cohort of students in one year.
- Clerkship / Outreach: This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.
- **Fieldwork placements:** This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).
- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.
- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.
- Climate justice: The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.
- Extractivisim: The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to the historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.
- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.

- Low socioeconomic status (SES): An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.
- Low and Middle-Income Countries (LMIC): Countries that have lower degrees of economic affluence.
- Anthropogenic: Created through human activity
- **Marginalized communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).
- Client: Individuals or collectives who access Occupational Therapy services.

#### **Other considerations:**

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

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

#### Noted areas for future improvement of the Occupational Therapy PHRC:

This current template was produced by a team of students from UK universities and from one South African University with additional input from occupational therapy educators from the UK. This approach is limited by the number of individuals and the diversity of opinions used to shape this occupational therapy PHRC template. Going forward collecting the perspectives of occupational therapy students and educators across the globe should enhance this template. Additionally, gaining feedback from Indigenous communities internationally, especially from the Global South, would provide much-needed insight to develop this template.

### **Planetary Health Curriculum**

<u>Section Overview:</u> This section evaluates the integration of relevant planetary health topics into the occupational therapy curriculum. Today's occupational therapy students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that occupational therapy 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 occupational therapy program's core curriculum.

#### Curriculum: General

1.1 Did your <u>occupational therapy department</u> offer elective courses/lectures (student selected modules) to engage students in Education for Sustainable Healthcare (ESH) or Planetary Health in the last year?

Yes, the occupational therapy school has offered **more than one** elective whose primary focus is ESH/planetary health in the past year. (3 points)

Yes, the occupational therapy school has offered **one** elective whose primary focus is ESH/planetary health in the past year. (2 points)

The occupational therapy 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 occupational therapy school has **not** offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. (0 points)

1

Score Assigned:

*Score explanation:* 

No elective courses or lectures engaging in Education for Sustainable Healthcare (ESH) or Planetary Health were offered to occupational therapy students in the time period assessed (February 17, 2024 - February 17, 2025).

As part of the Master of Occupational Therapy program at UBC, student pairs complete a research project alongside faculty and present their research at a Capstone Conference. Planetary health has been implemented as a research topic in recent years. Projects completed in recent years include "Guidelines for Creating an Occupational Therapy Climate Action Toolkit", "Exploring the Sustainability of Home Modifications and Adaptations in Occupational Therapy", and "The Perceived Role of Occupational Therapists in Climate Change", with the latter two being published in the Canadian Journal of Occupational Therapy. A project currently being worked on is titled "Climate-specific health literacy in Canadian occupational therapists" and will be presented at the 2025 Capstone Conference. Although this is not a lecture, students can select a planetary health topic for their research project, which is a key component of the curriculum, so we have awarded the occupational therapy department 1 point. This research experience equips graduates from the program to be evidence-driven practitioners and inspires continuous learning and progress in the field of occupational therapy.

#### Recommendations:

The occupational therapy department could offer optional workshops, possibly partnering with the UBC Sustainability office, including planetary health topics relevant to occupational therapy, such as providing sustainable interventions and therapy to clients and developing more sustainable workplaces. It is evident that climate-related research is important to the UBC Master of Occupational Therapy faculty, and we encourage them to continue sharing the important work they are doing with students and provide opportunities for students to be involved throughout the program.

#### Curriculum: Health Effects of Climate Change

# **1.2.** Does your <u>occupational therapy department's</u> 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:

Score explanation:

This topic was not covered in the last year (February 17, 2024 - February 17, 2025). It should be noted that this topic was covered in depth in a lecture 13 months prior to this report (just outside of the assessment period) titled "Occupational Therapy, Climate Change, Planetary and Human Health". This lecture discussed rising global temperatures and the impact of extreme heat on human health, including heat-related illness and death as well as wildfire and drought risk. This lecture is scheduled to be taught to occupational therapy students in May 2025 (following the publishing of this report).

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Recommendations:

Ensure this topic is included in the upcoming lecture in May 2025, and consider offering education to occupational therapy students on how to advocate and care for clients facing these health risks within occupational therapy practice.

**1.3.** Does your <u>occupational therapy department's</u> curriculum address the impacts of extreme weather events on individuals' health, occupations and wider 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 <b>not</b> covered. (0 points)	
Score Assigned:	0

This topic was not covered during the assessed period (February 17, 2024 - February 17, 2025). It should be noted that this topic was covered in depth in a lecture 13 months prior to this report (just outside of the last year) titled "Occupational Therapy, Climate Change, Planetary and Human Health", which will be taught in May 2025 following this report's publishing. This lecture discussed extreme weather events and their effect on human health through injuries, fatalities, pathogen vector changes, and mental health impacts, as well as infrastructure damage.

#### Recommendations:

Ensure this topic is included in the upcoming lecture in May 2025, and consider providing education/training on providing equipment, therapy, and support to clients/communities in anticipation of and following extreme weather events.

# 1.4. Does your <u>occupational therapy department's</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:

Score explanation:

This topic was not covered in the last year (February 17, 2024 - February 17, 2025). It should be noted that this topic was covered in a lecture 13 months prior to this report (just outside of the last year) titled "Occupational Therapy, Climate Change, Planetary and Human Health" which will be taught in May 2025 following this report's publishing. This lecture discussed the impact of climate change on changing patterns of infectious disease vectors and included examples of diseases with increasing ranges and their transmission.

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#### Recommendations:

Ensure this topic is included in the upcoming lecture in May 2025, and consider teaching clinical skills to address these health needs as occupational therapists including facilitating conversations with clients/communities about the health implications of novel diseases and changing disease patterns.

# **1.5.** Does your <u>occupational therapy department's</u> curriculum address the effects of climate change and air pollution on respiratory health and related occupational performance?

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 <b>not</b> covered. (0 points)	
Score Assigned:	0

This topic was not covered in the last year (February 17, 2024 - February 17, 2025). It should be noted that this topic was covered in a lecture 13 months prior to this report (just outside of the last year) titled "Occupational Therapy, Climate Change, Planetary and Human Health" which will be taught in May 2025 following this report's publishing. This lecture discussed the impacts of air pollution on respiratory health including wildfire smoke.

Recommendations:

Ensure this topic is included in the upcoming lecture in May 2025, and consider providing further details on the impact of air pollution on respiratory health, as well as the implications related to occupational performance for occupational therapy clients.

**1.6.** Does your <u>occupational therapy department's</u> curriculum address the effects of climate change, including rising temperatures, on cardiovascular health and related occupational performance?

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:

Score explanation:

This topic was not covered in the last year (February 17, 2024 - February 17, 2025). It should be noted that this topic was covered in a lecture 13 months prior to this report (just outside of the last year) titled "Occupational Therapy, Climate Change, Planetary and Human Health" which will be taught in May 2025 following this report's publishing. This lecture discussed the effects of extreme heat on cardiovascular health and the signs of extreme heat illness such as heat exhaustion and heat stroke.

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Recommendations:

Ensure this topic is included in the upcoming lecture in May 2025, and consider providing further details on the impact of rising temperatures on cardiovascular health, as well as the implications related to occupational performance for occupational therapy clients.

1.7. Does your <u>occupational therapy department's</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 <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	0

This topic was not covered in the last year (February 17, 2024 - February 17, 2025). It should be noted that this topic was covered in a lecture 13 months prior to this report (just outside of the last year) titled "Occupational Therapy, Climate Change, Planetary and Human Health" which will be taught in May 2025 following this report's publishing. This lecture discussed the concepts of climate grief and climate anxiety being experienced by people due to climate change and environmental degradation.

#### Recommendations:

Ensure this topic is included in the upcoming lecture in May 2025, and consider providing further details on the mental health impacts of climate change. Additionally, consider providing training on how to facilitate conversations with clients/communities about mental health and climate change by adding to pre-existing lectures or offering more lectures with this topic.

**1.8.** Does your <u>occupational therapy department's</u> curriculum address the relationships between health, individuals' 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:

Score explanation:

This topic was not covered in the last year (February 17, 2024 - February 17, 2025). It should be noted that this topic was covered in a lecture 13 months prior to this report (just outside of the last year) titled "Occupational Therapy, Climate Change, Planetary and Human Health" which will be taught in May 2025 following this report's publishing. This lecture noted food shortages, water quality and supply impacts and their effects on human health.

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#### Recommendations:

Ensure this topic is included in the upcoming lecture in May 2025, and consider providing further details on the relationship between water & food security and ecosystem health on human health and occupational performance.

**1.9.** Does your occupational therapy department's curriculum address how historical abuses of power (e.g. colonialism, extractivism, economic exploitation and marginalisation) are both

responsible for the climate crisis and disproportionately impact marginalised populations (e.g. 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:

#### *Score explanation:*

This topic was not covered in the last year (February 17, 2024 - February 17, 2025). This topic was covered briefly in a lecture titled "Occupational Therapy, Climate Change, Planetary and Human Health" in January 2024, and will be taught in May 2025. This lecture notes the disproportionate impacts of climate change on marginalised populations, the role of social determinants of health, and showcased Indigenous climate action in Canada. The impact of colonialism on Indigenous peoples' health and occupational participation is covered in depth in the occupational therapy curriculum.

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#### Recommendations:

Ensure this topic is included in the upcoming lecture in May 2025, and consider introducing curriculum content regarding the effects of colonialism on climate change and the disproportionate impacts on Indigenous communities and other marginalised populations in addition to the existing content.

**1.10.** Does your <u>occupational therapy department's</u> curriculum address the unequal regional health impacts of climate change globally and/or climate justice?

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:

*Score explanation:* This topic was not cover

This topic was not covered in the last year (February 17, 2024 - February 17, 2025). This topic was covered briefly in a lecture titled "Occupational Therapy, Climate Change, Planetary and Human Health" in January 2024, and will be taught in May 2025. The lecture included discussion of the unequal regional health impacts of climate change globally, remarking that the wealthiest countries create the most greenhouse gases, while other nations pay the price. As well, the lecture noted the disparate impacts of climate change throughout different regions in Canada, a country with the <u>second largest landmass</u> in the world and diverse geography. This lecture discussed key impacts

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within Canada and globally, including increased frequency of extreme weather events, desertification, drought, food shortages, forced migration, rising sea levels, and vector borne diseases. According to faculty, this topic will also be addressed during class discussions within the courses "Societal and Environmental Influences on Occupation and Occupational Therapy Practice" and "Occupation in Practice I: Foundation of Occupational Therapy Assessment and Intervention".

#### Recommendations:

Ensure this topic is included in the upcoming lecture in May 2025, and consider providing education to students on how these impacts affect healthcare systems within Canada and worldwide. In addition to addressing these topics in class discussions, consider creating learning objectives and formal content on planetary health as well as resources for students to investigate further and enrich learning.

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

**1.11.** Does your <u>occupational therapy department's</u> curriculum address the effects of industry-related environmental toxins on health (e.g. air pollution, pesticides), for example during paediatric or reproductive health curriculum?

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:

Score explanation:

The curriculum does not address the effects of industry-related environmental toxins, such as pollution and pesticides, on paediatric or reproductive health.

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Recommendations:

Consider incorporating the effects of pollution and pesticides on human health into the curriculum, particularly within the topics of child development in the Year 1 courses "Health, Illness & Occupation" and "Occupation in Practice II: Advancing Theory, Assessment and Intervention" and reproductive health in the Year 2 course "Occupation in Practice III: Occupational Therapy Assessment and Intervention".

**1.12.** Does your <u>occupational therapy department's</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 <b>not</b> covered. (0 points)	
Score Assigned: 0	

The curriculum does not address human-caused environmental threats that are relevant to the university's surrounding community.

#### Recommendations:

Incorporate discussion of the current and predicted health impacts due to regional climate-related threats, such as wildfires, extreme heat, drought, and flooding in the core curriculum. In addition, consider incorporating dialogue within the curriculum on occupational therapists' roles in anticipation of and following these impacts.

# **1.13.** To what extent does your <u>occupational therapy department</u> emphasise the importance of knowledge and value systems from Indigenous communities and the Global South as essential components of planetary health solutions?

These knowledge and value systems are **integrated throughout** the occupational therapy school's planetary health education (3 points)

These knowledge and value systems as essential components of planetary health solutions are included **briefly** in the core curriculum. (2 points)

These knowledge and value systems as essential components of planetary health solutions are included in **elective** coursework. (1 point)

0

This topic was not covered. (0 points)

Score Assigned:

Score explanation:

The importance of knowledge and value systems from Indigenous communities was briefly discussed in the course "Fundamentals of Occupational Therapy," but not in connection with planetary health. It should be noted however, that Indigenous climate action and the unequal impacts of climate change on the Global South are topics that have been explored in a lecture offered in January 2024, from the course "Developing Evidence for Occupational Therapy Practice".

#### Recommendations:

Explore the environmental impact of colonization on Indigenous communities and the Global South through dedicated lectures and specifically relate them to planetary health solutions and sustainable healthcare. Discuss how dualism vs. non-dualism in Western vs. Indigenous knowledge systems affect how people perceive human and planetary health. Drive discussion about the harmful consequences of climate change and colonialism, and about local efforts to dismantle oppressive systems through the study of occupational science and practice of occupational therapy (e.g. using discussion groups and class discussion boards). Provide students with other forms of educational resources to become involved in these initiatives, such as workshops and toolkits. 1.14. Does your <u>occupational therapy department's</u> curriculum address the outsized impact of anthropogenic environmental toxins on marginalized 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:

*Score explanation:* 

This topic was not covered in the occupational therapy program this year.

Recommendations:

Integrate the subject of anthropogenic environmental toxins within the curriculum of "Societal and Environmental Influences on Occupation and Occupational Therapy Practice" and explore how contamination and pollution disproportionately affect marginalized populations like those with low SES, women, communities of colour, Indigenous populations, and so on.

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#### Curriculum: Sustainability

1.15. Does your <u>occupational therapy department's</u> curriculum address the environmental and health co-benefits of holistic lifestyle adaptations (e.g. plant-based diets, use of greenspaces and social prescribing)?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was briefly covered in the core curriculum. (2 points)

This topic was covered in elective coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

0

This topic was not covered in any part of the current curriculum. However, it has been expressed to us by faculty that the environmental and health co-benefits of holistic lifestyle adaptations would be a good topic to explore in the course titled "Societal and Environmental Influences on Occupation and Occupational Therapy Practice" or "Innovations in Occupation: Developing and Evaluating Occupational Therapy Programs" from Year 2. Through the course "Developing Evidence for Occupational Therapy Practice", students led a Capstone project investigating occupational therapists' knowledge, perceptions, and practice related to social prescribing, but did not specifically examine the associated environmental benefits of practice.

#### Recommendations:

Explore holistic lifestyle adaptations in the courses mentioned above and include activities with case-based scenarios to stimulate critical reasoning. Encourage discussions around planetary health solutions and nature-based therapies in occupational therapy practice.

# **1.16.** Does your <u>occupational therapy department's</u> 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:

Score explanation:

This topic was not covered in the current curriculum. A lecture from January 2024, for the course "Developing Evidence for Occupational Therapy Practice", discussed the fact that healthcare systems contribute to approximately 5% of global carbon emissions. A faculty member has suggested that this topic could also be covered in the course titled "Societal and Environmental Influences on Occupation and Occupational Therapy Practice".

0

Recommendations:

Discuss the impact of healthcare systems on the environment and how to make occupational therapy practice more sustainable.

1.17. Does your <u>occupational therapy department's</u> curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (point for each)	
The health <b>and</b> environmental impact of providing information about <b>preventative measures</b> to <b>empower patients</b> to actively mitigate poorer health outcomes. (1 point)	0
The environmental impact of <b>pharmaceuticals</b> and over-prescribing as a cause of climate health harm. Alternatively teaching on <b>deprescribing</b> where possible and its environmental and health co-benefits would fulfil this metric. (1 point)	0
The health <b>and</b> environmental <b>co-benefits</b> of <b>non-pharmaceutical management</b> of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social	0

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)	
<b>Waste production</b> within healthcare <b>clinics</b> and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting). (1 point)	0
The health <b>and</b> environmental co-benefits of avoiding <b>over-investigation</b> and/or <b>over-treatment.</b> (1 point)	0

These 5 topics have not been covered in the occupational therapy program yet. As a discipline, occupational therapy utilizes "social prescribing" and non-pharmaceutical therapies to manage conditions and improve overall health and wellbeing. However, the curriculum does not delve into the environmental benefits of doing so.

#### Recommendations:

According to faculty, the courses titled "Developing Evidence for Occupational Therapy Practice" and "Societal and Environmental Influences on Occupation and Occupational Therapy Practice" would present good opportunities to explore some of these issues. These topics could also be integrated into "Small-Group Tutorial" cases for students to lead explorations into and discussions on sustainability and planetary health.

# **1.18.** Does your <u>occupational therapy department's</u> curriculum discuss the benefits and process of how to sustainably manage, recycle and repurpose prescribed equipment?

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:

Score explanation:

This topic was not covered in the occupational therapy program. According to faculty, the broader topic of global climate change and use of prescribed equipment will be touched on during class discussions.

0

Recommendations:

Practical courses that cover functional mobility and equipment prescription, such as "Occupation in Practice I: Foundation of Occupational Therapy Assessment and Intervention," "Occupation in Practice II: Advancing Theory, Assessment and Intervention," and "Occupation in Practice III: Occupational Therapy Assessment and Intervention" can include teachings of sustainable equipment management as a healthcare practitioner.

**1.19.** Does your <u>occupational therapy department's</u> curriculum address sustainability in regards to adaptations and environmental adjustments in the home and in communal spaces?

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:

Score explanation:

This topic was not covered in the occupational therapy program. According to faculty, this topic may be touched on during class discussions.

0

Recommendations:

Practical courses that cover home and communal space modifications/adaptations (for accessibility) can also discuss sustainability considerations.

#### **Curriculum: Clinical Applications**

**1.20.** In training for patient encounters, does your <u>occupational therapy department'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:

0

Score explanation:

This topic was not covered in the current curriculum. In January 2024, the course titled "Developing Evidence for Occupational Therapy Practice" included a lecture discussing the impact of climate change on human health. The lecture briefly covered climate grief/anxiety and climate action, but did not include strategies for how to communicate with clients.

Recommendations:

Include case-based scenarios and strategies for how to address the issue of climate change and health with clients.

**1.21.** In training for patient encounters, does your <u>occupational therapy department's</u> curriculum introduce strategies and OT models to take a holistic history of health experiences which consider environmental factors during an initial assessment?

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:

#### Score explanation:

The curriculum does instruct occupational therapy students on the use of OT models that consider environmental factors to take a holistic history of client health experiences, but environmental factors related to climate change, such as pollution and contamination, are not explicitly discussed. The course titled "Occupation in Practice I: Foundation of Occupational Therapy Assessment and Intervention" briefly covered environmental assessments in the context of promoting universal design and identifying barriers to accessibility, but climate change related environmental factors were not discussed.

0

#### Recommendations:

Practical courses that cover assessments and interventions such as "Occupation in Practice I: Foundation of Occupational Therapy Assessment and Intervention," "Occupation in Practice II: Advancing Theory, Assessment and Intervention," and "Occupation in Practice III: Occupational Therapy Assessment and Intervention" can also cover strategies to take a client's environmental history, explore climate change related environmental exposures and risk factors, and address certain issues through adaptations and interventions.

**1.22.** In training for quality improvement (QI) projects, does your <u>occupational therapy</u> <u>department's</u> curriculum discuss how planetary health concerns relate to wider healthcare service aims and outline the means to embed sustainability considerations into QI projects?

Yes, sustainable QI teaching and/or project opportunities are incorporated into the **core** curriculum. (2 points)

Yes, sustainable QI teaching and/or project opportunities are available through **elective** modules. (1 point)

No, sustainable QI teaching and/or project opportunities are **not** available to occupational therapy. (0 points)

Score Assigned:

0

Score explanation:

No sustainable QI teaching and/or project opportunities were available in the occupational therapy curriculum this year.

Recommendations:

Discuss planetary health concerns and how to deliver sustainable healthcare. Support and encourage students to explore QI project opportunities.

#### Curriculum: Administrative Support for Planetary Health

### **1.23.** Is your <u>occupational therapy department</u> currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?

Yes, the occupational therapy school is currently in the process of making **major** improvements to ESH/planetary health education. (4 points)

Yes, the occupational school is currently in the process of making **minor** improvements to ESH/planetary health education. (2 point)

No, there are **no** improvements to planetary health education in progress. (0 points)

Score Assigned:

#### Score explanation:

The Department of Occupational Science & Occupational Therapy at UBC was provided a Teaching and Learning Enhancement Fund (TLEF) in 2024-2025 for "Implementing Climate and Sustainability Education in Occupational Therapy Programs". Climate change and sustainability topics were delivered in a course offered in January 2024, in which final student projects addressing these topics were also actively supported. Opportunities for integrating content in multiple courses were identified by faculty members, and the department is actively working on the implementation stage.

4

#### Recommendations:

Continue improving Education for Sustainable Healthcare (ESH) and planetary health education within the occupational therapy program, honouring the commitment represented by the TLEF and taking opportunities to incorporate content about climate change and sustainable healthcare in class discussions and activities. Review feedback from this report and identify potential action items for planning and implementation.

**1.24.** 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 occupational therapy school curriculum. (6 points)

**Some** planetary health/ESH topics are appropriately integrated into the core occupational therapy student curriculum. (4 points)

Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s). (2 point)

There is **minimal/no** education for sustainable healthcare. (0 points)

Score Assigned:	0
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This topic has not been integrated in the occupational therapy curriculum in the past year. In January 2024, a lecture from the course titled "Developing Evidence for Occupational Therapy Practice" addressed planetary health concerns and climate leadership in occupational therapy. According to faculty, there are tentative plans to include topics and discussions about sustainable healthcare in courses related to professional reasoning, research designs, societal and environmental influences on occupation, and program development principles.

#### Recommendations:

Integrate planetary health and sustainable healthcare topics across the curriculum rather than in standalone lectures.

**1.25.** Does your <u>occupational therapy department</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 **occupational therapy school** has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)

No, the occupational therapy school does not have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)

0

Score Assigned:

*Score explanation:* 

The Occupational Science and Occupational Therapy department does not have a specific faculty member taking responsibility for incorporating planetary health and sustainable healthcare into the curriculum. However, there are a few members that have been greatly involved in planning and advancing these initiatives within their teaching and professional roles, with dedicated focus on climate action in occupational therapy. The department head leads a TLEF initiative for implementing climate and sustainable healthcare education in the UBC Master of Occupational Therapy program. The January 2024 lecture on planetary health from the course "Developing Evidence for Occupational Therapy Practice" was also delivered by two such faculty members.

Recommendations:

Consider appointing a specific faculty/staff member to oversee curricular integration of planetary health and sustainable healthcare.

Section Total (5 out of 76)

7%

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### **Interdisciplinary Research**

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

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your <u>institution</u>?

Yes, there are faculty members at the **institution** who have a **primary** research focus in planetary health **or** sustainable healthcare/vetcare. (3 points)

Yes, there are individual faculty members at the **institution** who are conducting research **related** to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points)

There are sustainability researchers at the **institution**, but not specifically associated with healthcare/vetcare. (1 point)

No, there are **no** planetary health and/or sustainability researchers at the **institution** at this time. (0 points)

3

Score Assigned:

Score explanation:

UBC has a research team called the <u>UBC Planetary Healthcare Lab</u>, that has the primary research focus of planetary health and healthcare sustainability. They state that their goal is, "[to] not only examine the environmental effects of healthcare delivery and services in B.C., but generate solutions to chart a path forward to net zero emissions". This initiative brings experts from diverse disciplines, such as engineering, economic, business, pharmaceutical sciences, together to determine best practices in healthcare and design sustainable interventions. They envision a health system that works for the best of both patient and planetary health. Some examples of recent publications from members of the UBC Planetary Healthcare Lab include: "Improving staff wellness via an after-hours healthy sustainable meals program: A general surgery residency pilot", "Improving sustainability and mitigating the environmental impacts of anaesthesia and surgery: a narrative review", "How do news about a heatwave affect public prioritization of climate change adaptation and mitigation behaviors?" \*manuscript currently under review.

The Occupational Science and Occupational Therapy department has faculty members that are conducting planetary health research as it relates to occupational therapy practice. Recent research topics have included <u>understanding the barriers to sustainable home modifications and adaptations</u> and <u>understanding the role of occupational therapists in climate change</u> (Dr. Ben Mortenson, Tanya Fawkes, Giovanna Boniface, Jeff Boniface).

# **2.2.** Is there a dedicated department or institute for interdisciplinary planetary health research at your <u>institution</u>?

There is **at least one** dedicated department or institute for interdisciplinary planetary health research. (3 points)

There is **not currently** a department or institute for interdisciplinary planetary health research, but there are **plans** to open one in the next 3 years. (2 points)

There is an **Occupational and Environmental Health department**, but no interdisciplinary department or institute for planetary health research. (1 points)

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

Score Assigned:

3

*Score explanation:* 

UBC has an interdisciplinary planetary health research initiative by the Faculty of Medicine called the <u>Climate Change and Planetary Health Initiative</u>. Articles from this initiative are published in Pathways, the award-winning, UBC Faculty of Medicine's digital magazine. Some examples of the research topics include health equity, climate anxiety, childhood development, Indigenous lung health, emergency drone delivery, nutrition and respiratory health, climate change and disability, and hospital food. Dr. Ben Mortenson, from the university's department of Occupational Science and Occupational Therapy, is included in this initiative as we see in the article "Putting Accessibility at the centre of climate action".

**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 <u>institution</u>?

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

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

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

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

Score Assigned:

3

*Score explanation:* 

We found evidence that demonstrates that UBC collaborates with communities that are disproportionately impacted by climate change towards research projects in some of the institution's departments. For example, the University of British Columbia's UBC Planetary Healthcare Lab is a founding partner of <u>CASCADES</u>, which engages in "Monthly Exchange Sessions" where folks from communities and researchers can "connect and discuss with others working to make Canadian healthcare more sustainable". The university's <u>Pulmonary</u>

<u>Rehabilitation Research Laboratory</u> is another example that demonstrates research is being done in collaboration with communities disproportionately affected by environmental injustice, for example the "Wildfire Smoke and Emergency Planning for First Nations People Living with Lung Disease in Remote and Rural British Columbia" research project. That being said, we did not find that UBC has a formal process for this collaboration and decision making for communities to provide input on research agendas at the institutional level.

UBC does, however, have the <u>Indigenous Research Support Initiative (IRSI)</u> that supports research partners based in academia and Indigenous communities to "co-develop a research framework that will support Indigenous, community based research collaborations in order that they are reciprocal and respectful". While this does meet the criteria of having a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at the institution, hence we have awarded full points for this question, we acknowledge that Indigenous communities are not the only communities who can fall under this category outlined in the question.

#### Recommendations:

According to the UBC Faculty of Medicine's Occupational Science and Occupational Therapy website, the Core Areas of Research include: Goal #1 (to collaborate with clinicians and people with lived experiences) and Goal #3 (Promote a sustainable, innovative, and impactful research program that improves the health and wellbeing of individuals and communities, enhances health service delivery, and influences policy.). We believe that both these goals have great potential to incorporate opportunities for engaging with communities impacted by climate and environmental injustice, but the explicit acknowledgement of people and communities disproportionately impacted by climate change and environmental injustice should be written within the research policies at departmental level, as well as institutional level.

### 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:

3

Score explanation:

UBC has <u>The Centre for Climate Justice</u>, which lists several ongoing projects and partnerships directly about climate action, and a list of current researchers across the university that have conducted studies on sustainability. Similarly, the <u>Climate Change Health Effects</u>, <u>Adaptation</u>, and <u>ResiLience (HEAL)</u> page also offers a list of current research projects. Both of these web pages, among other resources, can be found on the University of British Columbia Library's <u>Climate</u> <u>Change Research Guide</u> website which acts as a centralized webpage that includes links to access a

wide variety of resources related to health and the environment that provide information on upcoming events and leaders in planetary health at the university.

#### Recommendations:

Along with continuing to update the resources and webpages found linked on the library's webpage, we recommend adding information on past and future funding sources and opportunities connected to supporting research related to health and the environment. In addition, when following the link on the library's web page, in order to access current research projects, it takes you to UBC Sustainability's page that features predominantly student research but very little from faculty/professors. Having this type of centralized resource that is accessible to faculty and student researchers may be beneficial in promoting involvement in planetary health research.

### 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:

*Score explanation:* 

On October 26th, 2024, UBC's Climate Solutions Research Collective hosted a full day conference titled <u>UBC CPD: Climate Emergency: Tipping Points for Planetary Health</u>. This conference was created for health professionals, but the general public was also invited to attend. Some examples of the presentation topics included "Health Harm of Plastics in the Environment", "Gitanyow Health versus Pipeline Connectivity", "Environmental Sustainability within Radiology", and "Economics and Climate and the Impacts on Healthcare".

4

Recommendations:

We encourage UBC to continue hosting conferences and symposiums that focus on planetary health, such as the annual Climate Emergency: Tipping Points for Planetary Health conference. We encourage members of the Occupational Science and Occupational Therapy department to participate in these events.

**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 <b>or</b> ESH/ESV organisation. (1 points)	
No, the institution is <b>not</b> a member of such an organisation. (0 points)	
Score Assigned:	1
<i>Score explanation:</i> The University of British Columbia is a member of <u>The Consortium of Universities for Global</u> <u>Health (CUGH</u> ), which is engaged in addressing global health challenges.	

Section Total (17 out of 17)

100%

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### **Community Outreach and Advocacy**

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

### **3.1.** Does your <u>institution</u> partner with community organisations to promote planetary and environmental 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 has participating in community focused events relating to planetary health. (1 point)

3

No, there is **no** such meaningful community partnership. (0 points)

Score Assigned:

Score explanation:

The UBC Climate Hub collaborated with 23 community partners, 27 internal partners, and 10 external partners during their Climate Emergency Week. Throughout the year, multiple events were organized in collaboration with these partners. For example, the Teen Climate Café was a joint effort by Science World, Be the Change Earth Alliance, and the UBC Climate Hub, designed to raise community awareness and foster discussions on climate change. A detailed list of these events and partnerships is available on the <u>UBC Climate Hub</u> and <u>Sustainability</u> websites.

These partnerships highlight the Hub's commitment to community-based initiatives that promote dialogue and education about climate change and planetary health. Many of these initiatives address issues directly or indirectly tied to planetary health, such as climate-related anxiety. Furthermore, UBC students have opportunities to engage in these partnerships through the programs and events facilitated by the UBC Climate Hub.

Additionally, the UBC Faculty of Medicine has partnered with <u>Pathways to Equitable Healthy</u> <u>Cities</u>, a research initiative focused on the intersections of inequity, population health, and environmental sustainability. This collaboration underscores a global commitment to advancing research in planetary health.

Recommendations:

Provide and facilitate more leadership opportunities for students and occupational therapists or other allied health professionals to incorporate planetary health into clinical education placements.

Faculty from the Master of Occupational Therapy program have announced an upcoming student placement in collaboration with the OT Climate Action Network.

### **3.2.** Does your <u>institution</u> 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/healthcare school** have not offered such community-facing courses or events. (0 points)

3

Score Assigned:

#### Score explanation:

Faculty from the UBC Master of Occupational Therapy program are actively engaged in the <u>Justice, Equity, Diversity, and Inclusion in Occupational Therapy (JEDI-OT) group</u> within the Canadian Association of Occupational Therapy Practice Network. On November 29, 2024, they hosted a panel discussion exploring the connections between climate and occupational justice, which was open to faculty, students, and community-based occupational therapists.

The UBC Climate Hub, a student-led organization, focused on events designed to engage students and community stakeholders, while the Sustainability Hub, run by staff, supports faculty and students in integrating sustainability into education and professional practice. Both groups played significant roles in promoting planetary health through these initiatives.

In addition, UBC's Sustainability Hub and Climate Hub organized various events throughout the year to promote planetary health. Notable examples include an ecological grief workshop, Climate Emergency Week, a Teen Climate Café aimed at engaging younger community members, and a "slamposium" on climate issues. UBC also hosted several webinars on planetary health in the assessed period, which were open to the public and can be found along with other Sustainability Hub events at this link. A detailed list of events held by UBC's Climate Hub can be found here. Looking ahead, several upcoming events will focus on climate change that can be found on the <u>Climate Hub</u> and <u>Sustainability Hub</u> websites.

#### Recommendations:

Organize community events that focus more specifically on healthcare sustainability and occupational therapy, facilitated through the Faculty of Medicine or the Master of Occupational Therapy program. While this suggestion does not affect the current score, it would enhance UBC's engagement by complementing the institution's existing involvement in numerous community-facing events related to planetary health throughout the year.

**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:

#### Score explanation:

UBC communicates issues related to planetary health through various channels, including the <u>Climate Hub</u> and <u>Sustainability Hub</u>. The Faculty of Medicine publishes an online magazine called <u>Pathways</u>, which highlights biomedical innovations and explores the impact of climate change on health. Pathways is accessible to anyone through a free online subscription. Additionally, UBC's broadcast emails, which do not require a subscription, can include discussions on sustainability as part of their regular updates.

1

#### Recommendations:

Send out more emails directly connecting healthcare and sustainability related to occupational therapy for students.

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 provider. (1 point)

There are **no** such accessible courses for post-graduate providers. (0 points)

Score Assigned:

2

*Score explanation:* 

Between February 2024 and 2025, UBC's Continuing Professional Development program offered one climate change-related course titled "Navigating Climate Change: Perspectives from Indigenous Providers." This course was specifically designed for healthcare professionals. This course can be found <u>here</u>.

Additionally, the Learning Hub, an online platform accessible to students, volunteers, and employees in major health authorities across BC, offers several courses focused on planetary health. For instance, the course "Orientation to Sustainable Health Systems" explores the connections between climate change, health, and healthcare systems. Another course, "Going

Green at Work," provides practical strategies for healthcare staff to integrate sustainability into their daily practices. These courses can be found <u>here</u>.

Recommendations:

Include more courses or resources for post-grad occupational therapists that connect climate change to the scope of occupational therapy.

**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 <u>all</u> affiliated hospitals have accessible educational materials for patients. (2 points)

Some affiliated hospitals have accessible educational materials for patients. (1 point)

No affiliated healthcare centres have accessible educational materials for patients. (0 points)

Score Assigned:

2

#### Score explanation:

UBC Master of Occupational Therapy students may complete fieldwork placements in clinical teaching sites within health authorities in British Columbia, such as:

- Fraser Health Authority (FHA)
- Vancouver Coastal Health (VCH)
- Provincial Health Services Authority (PHSA)
- Northern Health Authority
- First Nations Health Authority (FNHA)
- Island Health
- Interior Health

These sites offer various resources to educate patients about environmental health exposures. Materials, such as pamphlets and brochures, address topics like extreme heat, smoke exposure, sun safety, and the impact of heat on medications and mental health. Specific resources include:

FHA:

- <u>Brochures and infographics</u> targeting specific populations (older adults, children etc.) regarding extreme weather.

VCH:

- Has a dedicated team for <u>Healthy Environments and Climate Change</u>, that provides resources and education to clients on weather and climate topics such as air quality.

PHSA:

- Has online printable <u>resources</u> for clients on floods, wildfires, smoke and extreme heat.
- <u>Mental Health Disaster Toolkit</u> to navigate mental health and substance use disorders
- during extreme weather events.

Northern Health Authority:

- Has online resources linking multiple health exposures, such as wildfire smoke, water quality, and extreme heat events. This set of resources can be found <u>here</u>.

FNHA:

- Provides multiple resources on their website related to drinking water safety, extreme heat, environmental contaminants, and wildfires, these can be found <u>here</u>.

Interior Health:

- Published a Climate Change, Health, and Well-Being Report and a Heat Response Planning for Southern Interior BC Communities toolkit. These resources can be found <u>here.</u>

Recommendations:

Increase collaboration between students and clinical teaching sites in creating resources that link Occupational Therapy to environmental health exposures.

### **3.6.** Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about the health impacts of climate change?

Yes, the **institution** or **<u>all</u> 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:

Score explanation:

Several health authorities that may oversee students' clinical placements offer resources that provide clients with information on health impacts of climate change.

FHA:

- Offers a resource overviewing <u>changing health and climate change</u> and impacts of <u>extreme</u> <u>weather on health</u>.

2

VCH:

- Provides a resource linking the impacts of climate change on air quality and health found <u>here</u>.
- Resources linking health impacts of climate change and community health available <u>here.</u> FHA and VCH collaborated to create:
  - <u>Climate Change and Health Adaptation Framework</u>
  - <u>Climate Change and Health Vulnerability and Capacity Assessment Summary</u> to address the health impacts of climate change.

FNHA:

- Has several resources linked through their Indigenous Climate Health Action Plan linked <u>here</u> and <u>here</u> that addresses impact of climate change on health and their initiatives. Interior Health:
- Interior Health:
  - Produced the "<u>Climate Change, Health and Wellbeing Report</u>" which outlines health impacts of climate change.
  - Provides a webpage clients can navigate to explore multiple impacts of climate change hazards available <u>here</u>.

Northern Health Authority:

- Published a report on the health impacts of climate change available here.

Notably, not all primary health authorities have accessible client resources on the health impacts of climate change online; but as many hospitals exist within the authorities full points were awarded.

Section Total (13 out of 14)

93%

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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 <u>institution</u> 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:

Score explanation:

UBC offers the <u>AMS sustainability project fund</u>, which can provide up to \$20,000 in funding towards student-led projects that encourage environmental, social and economic sustainability within the UBC community. Any student is welcome to apply, and funding is given to a variety of projects. They support projects that assess operations and information sharing, among other sustainability initiatives.

2

The Master of Occupational Therapy program does not offer any opportunities for students across the entire program to partake in sustainability initiatives/QI projects funded by grants or as part of the core curriculum at this time. The program does include a course titled "Developing Evidence for Occupational Therapy Practice" (OSOT 547) wherein students complete a Capstone research project which may involve sustainability QI projects depending on what research is being conducted that year.

Recommendations:

The Occupational Therapy Program should continue to offer opportunities for students to engage in sustainability research as part of their OSOT 547 course, and consider quality improvement sustainability projects as a meaningful stream to improve and add to Occupational Therapy research. No further recommendations at this time.

# **4.2.** Does your <u>institution</u> offer opportunities for students to do research related to planetary health and/or sustainable healthcare/vetcare?

The **institution** has a **specific** research program or fellowship for students interested in doing planetary health/sustainable healthcare/vetcare research. (2 points)

There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these **require student initiative** to seek these out and carry them out in their spare time. (1 point)

2

There are **no opportunities** for students to engage in planetary health/sustainable healthcare research. (0 points)

Score Assigned:

#### Score explanation:

While there is no specific research or fellowship program dedicated to planetary health, UBC does offer the <u>Sustainability Scholars program</u>. This program is open to all graduate students at UBC and offers students the opportunity to do paid work under the guidance of a mentor on an applied research project that supports their organization's sustainability goals. For example, the website includes multiple current projects that are related to planetary health such as "Extreme Heat Exposure and Vulnerability Mapping for Mainland Coast Salish First Nations" as well as reports from previous projects that engage with planetary healthcare initiatives or explore the effects of climate change on healthcare in the community.

As stated in section 4.1, the UBC Master of Occupational Therapy program includes a course titled "Developing Evidence for Occupational Therapy Practice" (OSOT 547) wherein students in their second year complete an independent research project. This project may be related to planetary health/sustainable healthcare, depending on what research topics are being offered at that time. In previous years this course has included projects such as "<u>The Perceived Role of Occupational</u> <u>Therapists in Climate Change</u>" where students held semi-structured interviews with occupational therapists to discuss their perspective on integrating climate change into their practice.

#### Recommendations:

UBC as an institution has set a good foundation for doing supported research in planetary healthcare, but could seek out more sustainable healthcare organizations and partner with them to facilitate a greater number of research projects available to students. The Master of Occupational Therapy program has also had some good opportunities for planetary health research in recent years. It is recommended that the program continue supporting this type of research in student projects, and work on incorporating multiple planetary health research Capstone projects every year for students to participate in.

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 healthcare school and/or contact 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
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The UBC Sustainability Hub offers a <u>website</u> where students are able to access a list of researchers involved in sustainability projects. From there they can refine their search by entering in keywords such as "health", and view a list of researchers many of whom are involved in sustainability research projects related to health or healthcare. Accessing this list requires initiative on the part of the student to search "health/healthcare" within the larger database. Students then need to delve further into the profiles of the individual faculty to see their publications and current research.

The Master of Occupational Therapy program offers no such page at this time, however students can easily access the Sustainability Hub website via online search.

#### Recommendations:

UBC would benefit from refining their sustainability researcher list by category and adding a category titled "Planetary Healthcare" so that students may more easily access research topics of interest by category. Creating categories would ensure that students would be able to browse through research initiatives and topics in a systematic manner and be exposed to more opportunities.

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:

Score explanation:

There are two main student organizations that are dedicated to planetary health at UBC:

- <u>The UBC Enviromed Club</u> -
  - Focuses on integrating student-led advocacy and action on climate change and planetary health within the medical field.

2

- Organizes events, conducts climate health workshop series, and participates in larger environmental movements to advocate for environmental justice.
- The UBC Medical Students for Climate Action group -
  - Involves students in the integration of climate-health knowledge into curricula and medical practice.
  - Organizes educational events, holds networking opportunities, advocacy initiatives, and aims to showcase how planetary health can be integrated into academia and clinical practice.
  - $\circ$   $\;$  Endorsed and advised by a faculty member.

4.5. Is there a student liaison representing sustainability interests who serves on a <u>department</u> <u>or institutional</u> decision-making council to advocate for curriculum reform and/or sustainability best practices?

Yes, there is a student representative that serves on a department or institutional decision-making council/committee. (1 points)

1

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

Score Assigned:

*Score explanation:* 

The AMS (Alma Mater Society) VP of Sustainability is a student who sits on the <u>UBC</u> <u>Sustainability Hub Advisory Committee</u> and is involved in planning and implementing sustainability initiatives in UBC's academic and operational systems. UBC also has a <u>student</u> <u>sustainability advisory council</u> composed of students from various sustainability groups across campus. These students partner with the Sustainability Hub, who works alongside the Provost, to increase sustainability representation within the institution.

Within the UBC Master of Occupational Therapy program there is a student who obtains feedback from fellow students regarding curriculum, methods of instruction and course content and relays this to the program's curriculum committee, however they do not currently represent sustainability interests.

#### Recommendations:

No further recommendations for UBC as an institution. In the future it may also be beneficial for the Master of Occupational Therapy program to engage a student that could help promote sustainability within the program. However, this would be more appropriate if there were also a staff member whose role is to advise on sustainability best practices.

4.6. In the past year, has the <u>institution</u> had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	Score
Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.	1
Panels, speaker series, or similar events related to planetary health that have students as an intended audience.	1
Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.	1
Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	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)

Score explanation:

<u>Organic agriculture:</u> The <u>UBC Farm Practicum</u> is a summer internship that provides students with the opportunity to work in UBC's farm and learn about sustainable food systems. This program promotes food justice and food sovereignty through hands-on education, encouraging the production of healthy food through sustainable methods.

<u>Panels/speaker series:</u> UBC offers a webinar titled "<u>Climate Change and Planetary Health:</u> <u>Challenges and Opportunities for Physicians and Healthcare</u>" where experts speak about healthcare professionals' roles in climate action and sustainable methods of practice.

<u>Environmental justice events:</u> UBC hosts <u>Climate Justice series</u> at least once a year. The most recent series, titled Climate Justice is Clean Air, provided a discussion focused on unequal exposure to air pollution and greenhouse gas exposure, and how we can address these disparities.

<u>Cultural art events</u>: There currently does not exist any cultural arts events, installations, or performances related to planetary health at UBC.

Local volunteer opportunities: In 2022, the UBC Indigenous Strategic Initiative Fund created a project called <u>Homegrown Climate Justice: Building Climate Resiliency Through Community</u>. This initiative works with individuals in the downtown eastside, a culturally diverse community of people (many of whom belong to visible minority groups) that currently faces a complex set of social issues, including disproportionately high levels of homelessness, mental illness, and drug use, and where many struggle to find support for basic necessities such as food, water, and shelter. This program works with individuals to create greenspaces in the community, informed and led by Indigenous worldviews and practices, with the goal of building climate resilience through community.

Students are also able to volunteer for the <u>Center for Sustainable Food Systems</u> at UBC farm, where they can choose between multiple volunteer programs including growing food, supporting the harvest, and building community, to help the program succeed in their vision of developing resilient, thriving, and socially just food systems.

<u>Wilderness/outdoors programs:</u> UBC runs a <u>Varsity Outdoors Club</u>, where students who join as members can sign up for various outdoors activities (cross country skiing, ice climbing, etc) and overnight trips (ski trips, mountaineering, avalanche training). This club, however, does not have any direct affiliations to planetary health at this time.

At this time the UBC Master's of Occupational Therapy program does not offer any co-curricular planetary health programs in these domains.

#### Recommendations:

UBC has made great progress at initiating programs and opportunities outside of the core curriculum for students to get involved in planetary health. UBC should work to offer more speaker series and environmental justice community-led initiatives surrounding the topic of planetary health, cultural arts events that are related to planetary health, and outdoor activities offered to students that have a component of planetary health built into the activity.

Section Total (12 out of 15)

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

#### 5.1. Does your institution have an Office of Sustainability?

Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is **at least one designated staff member** for sustainability at the hospital. (3 points)

There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but **no specific staff member** in charge of hospital sustainability. (2 points)

There are **no salaried sustainability staff**, but there is a sustainability task force or committee. (1 point)

There are **no** staff members **or** task force responsible for overseeing campus sustainability. (0 points)

Score Assigned:

3 points

Score explanation:

<u>UBC Sustainability</u> is the Office of Sustainability at UBC. It is a staff unit on the portfolio of UBC's provost. It has multiple full-time staff working on many different initiatives across the university. The <u>Advisory Committee</u> of UBC sustainability includes a clinical assistant professor in the school of population and public health. Additionally, there are <u>8 sustainability coordinators in</u> the UBC School of Medicine who are each connected to UBC Sustainability. None of these staff members, however, are directly related to the School of Occupational Therapy.

Recommendations:

Appoint a faculty member from the School of Occupational Therapy to the sustainability coordinator role in the UBC Faculty of Medicine and/or the UBC Sustainability Advisory Committee.

5.2. How ambitious is your <u>institution's</u> 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/healthcare school does **not** meet any of the requirements listed above (0 points)

Score Assigned: 3 points

Score explanation:

UBC Vancouver is targeting carbon neutrality (100% reduction in greenhouse gas emissions by 2035, and an 85% reduction in operational emissions by 2030). These goals are expressed in UBC's Climate Action Plan 2030 (CAP 2030). Progress towards the CAP 2030 goals can be found on the CAP 2030 Progress Dashboard.

Recommendations:

Uphold the commitment made in the CAP 2030 document and implement the necessary measures to achieve a 100% reduction in GHG emissions by 2035.

5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?		
Yes institution buildings are <b>100%</b> powered by re	enewable energy. (3 points)	
Institution buildings source >80% of energy needs from off-site and/or on-site renewable energy. (2 points)		
Institution buildings source $\geq 20\%$ of energy needs from off-site and/or on-site renewable energy. (1 point)		
Institution buildings source <b>&lt;20%</b> of energy needs from off-site and/or on-site renewable energy. (0 points)		
Score Assigned:	1 point	
Score explanation: The UBC Vancouver campus uses <u>61% renewable energy</u> from hydro, biomass, and renewable natural gas. Electricity at UBC is provided primarily by BC Hydro, which supplies energy that is <u>98% from renewable sources</u> , namely hydroelectricity. UBC reports that (as of 2017), <u>25%</u> of the campus' heating and hot water needs are supplied by using clean wood waste as biomass fuel, and the institution aims to utilize 100% low-carbon sources by 2030. Most hot water and heating makes use of the new Academic District Energy System ( <u>ADES</u> ) These low-carbon solutions are stated to begin in 2025. As of now, a significant portion of heating needs at UBC Vancouver are supplied with non-renewable <u>natural gas</u> supplied by Shell Energy North America.		
Uphold the commitment to utilize 100% low-carbon sources for fuel by 2030, and begin this		

transition in 2025.

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

Since 2008, <u>all new buildings</u> and renovations at UBC are mandated to be (at minimum) gold LEED certified. <u>31 buildings at UBC</u> have gold or higher LEED certification. UBC has also committed to, by 2035, having every building make net positive contributions to human and natural systems as per the <u>UBC Green Building Action Plan</u>. This plan, along with the <u>UBC Technical Guidelines</u> and the <u>UBC LEED Implementation Guide</u> lay out plans for new buildings and retrofitting old buildings to ensure sustainability criteria are met. UBC also has the <u>Building Tune-Ups program</u>, where energy use data in buildings are collected and used to reprogram/ schedule use of lighting and heat to reflect usage and need.

Many older buildings have not yet been retrofitted.

Recommendations:

- Uphold the high standard of new building sustainability.
- Given the large number of older buildings at the UBC Vancouver campus, there is a need to investigate if the carbon-savings of retrofitting old buildings for energy efficiency is a net positive or net negative for fuel use. If indicated, sustainable renovations for old buildings may be in order.

5.5. Has the <u>institution</u> 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 points

The University of British Columbia subsidizes transit passes for UBC students in Vancouver through the U-Pass BC program. U-Pass gives students unlimited access to transit services (Bus routes, train lines, sea bus) across all zones. The program costs \$184 (CAD) per term, and is automatically included in UBC student fees. The Vancouver transit system is well-utilized by students, with 80,000 trips made to and from campus daily.

Additionally, the UBC Vancouver campus itself supports cycling infrastructure, including bike lanes, traffic-slowed/ pedestrian priority zones, and an E-bike subsidy and rental program for students. UBC also offers <u>13 free bike cages around campus</u>, as well as access to secure bike lockers should students wish to rent a locker for the year. The school also piloted a <u>monitored bike valet program</u> in the fall of 2024 to increase the security of bicycle and micro-mobility parking at UBC.

UBC also supports carpooling through Liftango, a program through which students can connect and earn money through carpooling.

Information about carbon-friendly commuting options is readily available on UBC's <u>plan your</u> commute page.

Recommendations:

Extend measures like this to the UBC North, Fraser and Okanagan campuses.

5.6. Does your <u>institution</u> 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 healthcare school. (0 points)

Score Assigned:

2 points

*Score explanation:* 

The University of British Columbia diverts waste into four streams - food scraps (compost), containers (plastic, metal, glass), paper, and garbage. The composting and recycling bins are plentiful and are found together in every UBC building. Each stream is clearly labelled, and further information can be found on the <u>UBC Sort It Out page</u>, which includes accessible information about signage and what materials go in each bin, as well as the "A-Z Recyclopedia," and a "Sort It Out" waste sorting online game.

All food waste has been taken to an <u>off campus recycler</u> since January 2022, when UBC decommissioned their on-campus composter due to aging infrastructure and costly maintenance. All garbage and non-recyclables are taken to the Vancouver transfer station, and recyclables are taken to specialist facilities around Metro Vancouver.

Recommendations:

- Re-commission the on-site composter to reduce emissions used to transport compost.

Expand student education (e-learning course) of waste separation and use of recycling bins to ensure effective use of the bins.

5.7. Does the <u>institution</u> apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?

Yes, the institution has adequate sustainability requirements for food and beverages, including meat-free days or no red-meat, and is engaged in efforts to increase food and beverage sustainability. (3 points)

There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution **is engaged** in efforts to increase food and beverage sustainability. (2 points)

There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution is **not** engaged in efforts to increase food and beverage sustainability. (1 point)

There are **no** sustainability guidelines for food and beverages. (0 points)

Score Assigned:

2 points

Score explanation:

The UBC Food Services Vision, Mission & Values statement lays out a series of values that will guide decision making around food at UBC. Among these value statements are commitments to the Indigenous strategic plan, food sovereignty, the procurement of sustainable foods, and "caring for and supporting our planet." A sub-value within this latter statement is the promotion of plant-forward eating (reducing red meat and dairy, and ensuring plant based options are available, abundant, and affordable). To this end, UBC has also enacted the use of Climate-Friendly Food (CFF) Labels, which provide info about a meal's environmental impact. This information includes GHG emissions, land use, nitrogen impact, and water usage. UBC is also an Oceanwise partner, and follows the zero-waste food ware strategy to reduce single use items and promote a circular economy lens. UBC Vancouver also has the Centre for Sustainable Food Systems at the UBC Farm, which aims to explore alternative models for sustainable communities through the Campus as a Living Lab initiative. The UBC Farm is a 24-hectare certified organic farm that grows over 200 varieties of fruits and vegetables and supports honeybees and open-pasture hens. Many more resources are available through the <u>UBC Food website</u>. UBC is clearly committed to creating a sustainable food system, but has not yet instituted mandatory measures reducing meat consumption on campus, so we have chosen to assign 2 points instead of 3, despite the extensive sustainability focus on food.

Recommendations:

Include campus-wide measures to reduce meat consumption, further promotion of plant-based food availability and affordability.

**5.8.** Does the <u>institution</u> 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:

3 points

*Score explanation:* 

UBC Financial Operations apply <u>sustainability vision goals to all UBC business decisions</u> affecting the supply of goods and services for operational needs and related transactions. UBC offers priority to suppliers who are committed to sustainability and circular economy practices by having prospective organizations demonstrate their ability to help UBC achieve each of their sustainability goals as part of the <u>Zero Waste Action Plan</u>. UBC suppliers must adhere to the following regulations regarding sustainability (taken from the <u>Supplier's Code of Conduct</u>):

- Ensure all waste materials, as a by-product of production, are disposed of properly in an environmentally responsible manner, and according to the local and international laws and regulations.
- Seek out leading industry practices aimed at conserving natural resources and reducing carbon emissions.
- Commit to packaging standards that reduce the amount of materials used or have a recycled content with a minimum of 30% post consumer waste content.
- Ensure compliance with third party, bona fide, local and international standards for materials and ethical conduct.

Also of note, many of the publicly available information pages on this topic end in dead links.

Recommendations:

- Create written, specific, and mandatory sustainable supply procurement guidelines.
- Update links to policy around supply procurement decision making or public access and transparency.

#### 5.9. Are there sustainability requirements or guidelines for events hosted at the institution?

Every event hosted at the institution must abide by sustainability criteria. (2 points)

The institution **strongly recommends or incentivizes** sustainability measures, but they are **not required.** (1 point)

There are **no** sustainability guidelines for institution events. (0 points)

Score Assigned:

1 point

*Score explanation:* 

Recommendations on how to "<u>green your event</u>" exist and are readily available through UBC Sustainability. However, the recommendations are not mandatory. <u>General event guidelines</u> exist on UBC websites, but do not contain any considerations for sustainability.

Recommendations:

- Update links for public access and transparency
- Create mandatory sustainable event guidelines

5.10. Does your <u>institution</u> have programs and initiatives to assist with making lab spaces more environmentally sustainable?		
Yes, the institution has <b>programs</b> and <b>initiatives</b> to assist with making lab spaces more environmentally sustainable. (2 points)		
There are <b>guidelines</b> on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)		
There are <b>no</b> efforts at the institution to make lab spaces more sustainable. (0 points)		
Score Assigned:	2 points	
Score explanation:	1 22 1 . 1 . 1 1 1 1 1	

UBC Sustainability coordinates the "<u>Green your lab" program</u>, which includes guidelines and education opportunities about how to make lab spaces more environmentally sustainable, including recommendations around reducing waste, conserving energy and water, building a green team, green purchasing, and funding opportunities for green initiatives in lab spaces. UBC Sustainability also heads the "Lab Sustainability Coordinators Program," which creates paid positions for researchers to encourage adoption of sustainable practices in labs and inform their departments on approaches, procedures, and policies to minimize their environmental impact.

Additionally, a key throughline of UBC's Campus Sustainability is the Campus as a Living Lab (CLL) initiative. Coordinated by the UBC Sustainability Hub, the CLL initiative provides a framework for UBC students, faculty, staff, and partners to tackle large-scale sustainability problems through making use of campus resources, collaboration, and knowledge exchange. In the words of the initiative itself: "Campus as a Living Lab" (CLL) integrates the operations, infrastructure and academic capacity of a university to advance research, learning and sustainability initiatives. CLLs leverage the unique resources of a university to address sustainability challenges

through the exploration and application of innovations, using its campus as a vibrant and dynamic <u>learning laboratory</u>." The Living Lab creates a bridge between theoretical research and practical application for the advancement of climate solutions at UBC. It includes a wide range of activities, from large-scale capital projects, to supporting research and development for new technologies, to supporting innovative student learning experiences. Overall, it provides a framework and philosophy for the enablement of innovative sustainability solutions and projects.

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 points

*Score explanation:* 

UBC <u>Committed to full divestment</u> of its endowment fund from fossil fuels in 2019, when they also officially declared a <u>climate emergency</u>. <u>The commitment</u> stated: "UBC is committed to eliminating all portfolio exposure in its Main Endowment Pool to companies that extract or process fossil fuels by 2030." UBC also has extensive policy in place establishing their intent to divest from fossil fuels, and as of December 2023, the UBC Endowment fund's carbon emissions footprint was 49% below the baseline level set in 2019. UBC is on the path towards, but has not yet fully achieved full divestment from fossil fuels. Information on UBC investment management can be found in the <u>UBC IM reports</u>.

*Recommendations:* Uphold the commitment to full divestment by 2030.

Section Total (23 out of 32)

72%

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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	
А	80% - 100%	
В	60% - 79%	
С	40% - 59%	
D	20% - 39%	
F	0% - 19%	

\*Within each grade bracket, a score in the top 5% ( $_5$  to $_9$ %), receives a "+", and a score in the bottom 5% ( $_0$  - 4%) receives a "--". For example, a percentage score of 78% would be a B+.

# Planetary Health Grades for the University of British Columbia Occupational Therapy Programme

The following table presents the individual section grades and overall institutional grade for the University of British Columbia School of Occupational therapy on this OT-school-specific Planetary Health Report Card.

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(5/76) \ge 100 = 7\%$	F
Interdisciplinary Research (17.5%)	(17/17) x 100 = 100%	A+
Community Outreach and Advocacy (17.5%)	(13/14) x 100 = 93%	А
Support for Student-led Planetary Health Initiatives (17.5%)	(12/15) x 100= 80%	A-
Campus Sustainability (17.5%)	(23/32) x 100 = 72%	В
Institutional Grade	(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 62.48%	В-