

Planetary Health Report Card (Nursing):

University of Toronto (Bloomberg Faculty of Nursing)



2024-2025 Contributing Team:

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Land acknowledgment: We wish to acknowledge this land on which the University of Toronto operates. For thousands of years it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land.

Summary of Findings

Overall Grade

Curriculum

- The University of Toronto Bloomberg school of nursing has made great strides in developing its planetary health curriculum after hearing student feedback in 2023-2024. Both first and second year lectures now include education on extreme weather events, impacts on marginalized groups and Indigenous understandings of planetary health. The curriculum still has opportunities to improve especially in terms of exploring the impacts of human instigated drivers of environmental degradation, ie. war/conflict, mass displacement etc.
- **Recommendation #1:** Bloomberg Nursing should aim to consistently implement guest lectures from expert guests in order to ensure every cohort is able to access a fulsome and diverse education on planetary health.
- **Recommendation #2:** Lecturers should highlight upcoming elective IPE (interprofessional education) options to students and encourage participation.
- **Recommendation #3:** For the community paper for NUR390, the course can highlight environmental factors as a health issue, and provide local examples, so that students may write their final report on a topic related to planetary health.

Interdisciplinary Research

- The University of Toronto Bloomberg School of Nursing has strong representation within planetary health research and interdisciplinary work best exemplified by their involvement with the Collaborative Centre for Climate, Health and Sustainable Care (CCCHSC). The Collaborative Centre brought together all major professional health program educators and learners through their inaugural symposium in Oct 2024. The group hopes to continue growing and working together as they work on the 2025 symposium and affiliated projects.
- **Recommendation #1**: While Bloomberg Nursing has strong connections to University of Toronto interdisciplinary work there is little to no involvement on an international level. The school of nursing should aim to join the Global Consortium on Climate and Health Education and the Planetary Health Alliance. Many Canadian medical and public health schools have joined these groups. Bloomberg Nursing would lead the way for other Canadian nursing schools by being the first to collaborate on planetary health on a global level.
- **Recommendation #2:** While Bloomberg Nursing excels at interdisciplinary research on a scholarly level it is difficult for learners to access or learn about these opportunities. The school should aim to create more IPE opportunities that spotlight the interdisciplinary research being done by Bloomberg nursing researchers. They could also create a planetary health-specific Rosenstadt research development program (RRDP) position to fund a nursing student to work on a climate and health project.

Community Outreach and Advocacy

- University of Toronto Bloomberg Nursing has little direct community outreach relating to planetary health. The school contributes to a seminar series and courses through the interdisciplinary Collaborative Centre for Climate, Health and Sustainable Care. However specific seminars hosted by Bloomberg are on contributing determinants and not specifically planetary health. Additionally the faculty-run Bloomberg E-Pulse Newsletter and the student-run Nursing Undergraduates Society Newsletter both fail to dedicate regular coverage related to planetary health or sustainable healthcare. Further the school of nursing does not provide any resources for patients on planetary health thus relying on the large network of affiliated hospitals to have resources.
- **Recommendation #1:** Partnering with community organizations for planetary health initiatives. For example, a sustainable community organization in Toronto such as Not Far From The Tree, which focuses

D+

A

B

B+

on reducing food waste and strengthening local food systems and was featured by Toronto Foundation.

• **Recommendation #2:** Development of nursing focused resources for patients and students about planetary health. For example: how to navigate conversations about planetary health with patients and residents. These resources can be developed in partnership with the Canadian Association of Nurses for the Environment (CANE).

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Support for Student-Led Initiatives

- The University of Toronto provides many opportunities and support for student-led planetary health initiatives. There are seed grants offered to support collaborative research that are up to \$10,000. There is support for students to do planetary health research in the Rosenstadt Research Development Program (RRDP) for nursing students, the Collaborative Centre for Climate, Health and Sustainable Care (CCCHSC) offers up to \$2500 in funding to its members to hire full-time students in the upcoming summer of 2025. They also offer a Planetary Health Certificate Program to educate health professionals about the intersection of planetary health and healthcare. The university has many recognized student groups that promote planetary health and sustainability, but there is a lack of evidence of support from Faculty. There are also many co-curricular planetary health activities conducted in the previous year such as an Art Contest for the Global Health Conference on Climate Change and and the 5K Charity Run hosted on Campus by the Nursing Undergraduate Society (NUS).
- **Recommendation #1:** The RRDP can recruit or promote more principal investigators or researchers who focus on planetary health. This can help more nursing students to be involved in research regarding sustainability and healthcare.
- **Recommendation #2:** While there is the CCCHSC website, it only showcases webinar seminars and presentations. The website can focus on highlighting upcoming planetary health activities or mentors whom students can reach out to for current projects.

Campus Sustainability

- The University of Toronto has taken steps to progress towards the path of campus sustainability in several ways. The university has a Sustainability Office that is run by multiple staff members, but there is no specific staff role in charge of hospital sustainability. The university has been strong in organic and recyclable waste programs throughout the campus. About \$50 million of funding has been provided to retrofit old campus infrastructure to minimize water, energy and waste production, and prevent hazardous emissions and effluents. The university also plans to reduce greenhouse gas emissions by 50% using renewable energy sources. There is an initiative in place for sustainable lab programs for lab spaces by the Sustainability Office. The University of Toronto has made the effort to divest from all direct investments in fossil fuels, and is planning to reduce the indirect investments.
- **Recommendation #1:** The university aims to be climate positive by 2050, but there is no indication of a date set for carbon neutrality. We recommend that the university begins envisioning carbon neutrality by either setting a deadline or working towards being climate positive sooner.
- **Recommendation #2:** The university has recommendations for practicing sustainability in events and food and beverages, but they need more clear guidelines and practices in which not all, but some sustainable practices should be required to enable change.
- **Recommendation #3:** The University of Toronto can focus on promoting accessibility to sustainable transportation services, advertising of options on and off campus, and advocating for financial accessibility for students on campus.

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 medical school's institutional priorities do not reflect the urgency of this danger to human health.

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

Definitions & Other Considerations

Definitions:

- Planetary Health: is described by the Planetary Health Alliance as "the health of human civilisation and the state of the natural systems on which it depends." For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional 'environmental health' examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of medical school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term "planetary health" to satisfy the metric.
- Sustainable Healthcare: As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.
- Education for Sustainable Healthcare (ESH): is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the 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.
- Nursing School/Department vs. Institution: When "nursing school" is specified in the report card, this only refers to curriculum and resources offered by the School/department of nursing 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 nursing students, no matter where in the institution the resource comes from or if it is

specifically targeted for medical students, can meet this metric.

- Environmental history: This is a series of questions students are taught to ask during medical encounters that elicits patients' exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mould after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution. Please be as specific as possible when providing evidence for this metric.
- Elective: The word "elective" refers to an optional course or lecture series that a medical student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- **Core Curriculum:** This refers to taught material that is delivered to the entire cohort of students in one year.
- Clerkship / Outreach: This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.
- Clinical rotation: This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).
- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.
- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.
- Climate justice: The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.
- **Extractivism:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to the

historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.

- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.
- Low socioeconomic status (SES): An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.
- Low and Middle-Income Countries (LMIC): Countries that have lower degrees of economic affluence.
- Anthropogenic: Created through human activity
- **Marginalized communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).

Other considerations:

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

Completed in 2022 a <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.

Planetary Health Curriculum

<u>Section Overview:</u> This section evaluates the integration of relevant planetary health topics into the nursing school curriculum. The curriculum for nursing programs around the world shares many core topics regarding health and the medical system. In order to create a truly holistic education that includes the implications of our changing climate, the subject must be integrated into the nursing curriculum. As future frontline workers, nurses will experience the dire consequences of climate change firsthand and must be equipped to not only care for afflicted patients but to encourage preventative change. We are already seeing the impacts on human health that climate change can bring, and the nursing curriculum must reflect these realities.

Questions with a "" next to them signify questions that are unique to the Nursing Planetary Health Report Card.*

1.1. Does your nursing school offer courses regarding the relationships between extrem	e
weather events, health effects, 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 is discussed in a series of slides in the first year course NURS 351 Week 10 lecture, "Planetary Health Care & Environmentally Responsible Practice", where the climate pressures, exposure pathways and impacts on human health are highlighted. These topics were also looked at in the required readings/modules for the previously mentioned lecture:

3

- Canadian Federal of Nurses Unions (2019). Climate change and health: It's time for nurses to act.

https://nursesunions.ca/wp-content/uploads/2019/05/CFNU_climatechange-web.pdf

- Levinson, W. (2024). Medical Practice and the Climate Crisis. JAMA: The Journal of the American Medical Association. <u>https://doi.org/10.1001/jama.2024.8163https://librarysearch.library.utoronto.ca/permalink/</u> 01UTORONTO INST/fedca1/cdi proquest miscellaneous 3081777035
- *Nursing and Climate Change Module (https://vbd.casn.ca/index.php/e-resource-access/)*

The topic was also discussed in the year 2 courses, NUR 420 and NUR461:

NUR420

The Week 4 lecture "Environmental Sustainability", briefly explored the impact of climate change on health and the environment and the climate crisis. Required readings:

- MacNeill, A. J., McGain, F., & Sherman, J. D. (2021). Planetary health care: A framework for sustainable health systems. The Lancet Planetary Health, 5(2), 66-68.
- Rizan, C., Reed, M., & Bhutta, M. F. (2021). Environmental impact of personal protective equipment distributed for use by health and social care services in England in the first six

months of the COVID-19 pandemic. Journal of the Royal Society of Medicine, 114(5), 250-263.

- Saravanos, G. L., Islam, M. S., Huang, Y., Basseal, J. M., Seale, H., Mitchell, B. G., & Sheel, M. (2024). Infection prevention and control programme priorities for sustainable health and environmental systems. BMC Global and Public Health, 2(1), 1-4.

NUR420

The Week 5 lecture "Climate Change and Mental Health", explored the relationship between climate change and the inequitable health outcomes it has on people with mental illness. Assigned readings:

- Alegría, M., NeMoyer, A., Falgàs Bagué, I., Wang, Y., & Alvarez, K. (2018). Social determinants of mental health: Where we are and where we need to go. Psychiatry reports, 20, 1-13.
- Berry, H. L., Bowen, K., & Kjellstrom, T. (2010). Climate change and mental health: A causal pathways framework. International Journal of Public Health, 55, 123-132.
- Bowleg, L. (2012). The problem with the phrase women and minorities: Intersectionality an important theoretical framework for public health. American Journal of Public Health, 102(7), 1267-1273.
- Fleming, A., Vanclay, F., Hiller, C., & Wilson, S. (2014). Challenging dominant discourses of climate change. Climate Change, 127, 407-418.

NUR 461

The Week 11 lecture "Responding to the Realities of the Climate Crisis: Building Sustainable and Resilient Communities", explored "health impacts of climate change related to heat stress, infectious disease, natural hazards, and droughts"

Assigned Readings:

- CNA (2024). Position Statement: Planetary Health. Retrieved from:
- https://cane-aiie.ca/CNA-Planetary-Health-position-statement_E.pdfLinks to an external site.
- Swanson, K. (2021). Equity in urban climate change adaptation planning: a review of research. Urban Planning, 6(4), 287-297.

1.2. Does your nursing program provide education regarding the impacts of extreme weather events (e.g. storm, flooding, heat, drought, air pollution) on individual health?

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

Score explanation:

This topic is briefly covered in the first year course, NUR 351 week 10 lecture titled "Climate and Environmentally Responsible Practice". The lecture explored the relationship between climate change and health and the effects of extreme weather events on health and healthcare systems. The topic is also covered in the second year course, NUR461 week 11 lecture titled "Responding to the Realities of the Climate Crisis: Building Sustainable and Resilient Communities", explored "health

impacts of climate change and environmental degradation related to heat stress, infectious disease, natural hazards, and droughts".

1.3. Does your nursing curriculum address the impacts of climate change on the changing patterns of infectious diseases?

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

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

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

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

Score Assigned:

2

Score explanation:

This topic was discussed briefly in the NUR351 week 10 lecture titled "Planetary Health and Environmentally Responsible Practice".

Required readings/modules:

- Canadian Federal of Nurses Unions (2019). Climate change and health: It's time for nurses to act.
 - https://nursesunions.ca/wp-content/uploads/2019/05/CFNU_climatechange-web.pdf
- Nursing and Climate Change Module (https://vbd.casn.ca/index.php/e-resource-access/)

1.4. Does your nursing curriculum address pathophysiological health effects resulting from environmental degradation and climate change, including effects such as air, soil and water pollution, extreme heat, human-animal interactions, and emerging pathogens?

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 is discussed in a series of slides in the first year course NURS 351 Week 10 lecture, "Planetary Health Care & Environmentally Responsible Practice", health effects of climate change and environmental degradation are highlighted. These topics were also looked at in the required readings/modules for the previously mentioned lecture:

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- Canadian Federal of Nurses Unions (2019). Climate change and health: It's time for nurses to act.
 - https://nursesunions.ca/wp-content/uploads/2019/05/CFNU_climatechange-web.pdf
- Levinson, W. (2024). Medical Practice and the Climate Crisis. JAMA: The Journal of the American Medical Association. <u>https://doi.org/10.1001/jama.2024.8163https://librarysearch.library.utoronto.ca/permalink/</u>
- 01UTORONTO_INST/fedca1/cdi_proquest_miscellaneous_3081777035
- Nursing and Climate Change Module (<u>https://vbd.casn.ca/index.php/e-resource-access/</u>)

The topic was also discussed in the year 2 courses, NUR 420 and NUR461: NUR420

The Week 4 lecture "Environmental Sustainability", briefly explored the pathophysiological health effects of climate change.

Required readings:

- MacNeill, A. J., McGain, F., & Sherman, J. D. (2021). Planetary health care: A framework for sustainable health systems. The Lancet Planetary Health, 5(2), 66-68.
- Rizan, C., Reed, M., & Bhutta, M. F. (2021). Environmental impact of personal protective equipment distributed for use by health and social care services in England in the first six months of the COVID-19 pandemic. Journal of the Royal Society of Medicine, 114(5), 250-263.
- Saravanos, G. L., Islam, M. S., Huang, Y., Basseal, J. M., Seale, H., Mitchell, B. G., & Sheel, M. (2024). Infection prevention and control programme priorities for sustainable health and environmental systems. BMC Global and Public Health, 2(1), 1-4.

NUR 461

The Week 11 lecture "Responding to the Realities of the Climate Crisis: Building Sustainable and Resilient Communities", explored "health impacts of climate change and environmental degradation related to heat stress, infectious disease, natural hazards, and droughts" Assigned Readings:

- CNA (2024). Position Statement: Planetary Health. Retrieved from: https://cane-aiie.ca/CNA-Planetary-Health-position-statement_E.pdfLinks to an external site.
- Swanson, K. (2021). Equity in urban climate change adaptation planning: a review of research. Urban Planning, 6(4), 287-297.

1.5. Does your nursing curriculum address mental health issues and well-being effects resulting from environmental degradation and climate change?

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

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

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

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

Score Assigned:

Score explanation:

This topic was covered briefly in year 1 course NUR351 Week 10 where the mental health impacts of climate change are highlighted with focus on eco-anxiety, eco-paralysis and PTSD. In year 2, this topic is discussed in depth in NUR 420 week 5 lecture titled "Climate Change Impacts on Mental Illness As a Social Determinant of Health". The lecture explored "how climate change affects mental health" with "Biological Explanations" and "Sociological Explanations".

3

1.6. Does your nursing curriculum address relationships between climate change, food and water security, and the impact on health?

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

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

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

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

Score Assigned:

Score explanation:

This topic is explored in-depth in both year one and year two of the program. In year one, this topic is thoroughly discussed in the NUR 350 lecture "Planetary Health and Environmentally Responsible Practice". This lecture examined the effects of climate change on health and healthcare systems, the concept of planetary health, vulnerable groups affected by climate change, and promoting environmental sustainability. In year two the topic is discussed in the NUR 461 lecture "Responding to the Realities of Climate Crisis: Building Sustainable and Resilient Communities". This lecture discussed ecological determinants of health, ecotoxicity, resource depletion, oceanic acidification, and disproportionate health impacts of climate change on vulnerable populations. The social determinants of health, including food and water security, are discussed in courses throughout the program, in particular in two separate lectures in NUR 390.

3

NUR 350: <u>https://bloomberg.nursing.utoronto.ca/course/nur350y1/</u> NUR 461: <u>https://bloomberg.nursing.utoronto.ca/course/nur461y1/</u> NUR 390: https://bloomberg.nursing.utoronto.ca/course/nur390h1/

1.7. Does your nursing program	address the environmental	and health co-benefits of a
plant-based diet?		

0

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 is not explored in the curriculum.

1.8. Does your nursing school curriculum address relationships between ecosystem health, human health, and climate change?		
This topic was explored in depth by the core curriculum. (3 points)		
This topic was briefly covered in the core curriculum. (2 points)		
This topic was covered in elective coursework. (1 point)		
This topic was not covered. (0 points)		
Score Assigned:	3	
Score explanation: This topic is explored in-depth in a year one NUR Environmentally Responsible Practice", which for and the role of nursing in the promotion of planet in the year 2 NUR 461 lecture, entitled "Respond Sustainable and Resilient Communities", which d related to climate change related to heat stress, in and the disproportionate health impact of these for 420 Lecture, "Environmental Sustainability" also healthcare sector on climate change. Students als Nursing and Climate change module and self-refl explored climate change, health, and nursing activ	2 351 lecture "Planetary Health and cused on the impact of climate change on health ary health. The topic is also thoroughly explored ing to the Realities of Climate Crisis: Building liscussed the health impacts of climate change effectious disease, natural hazards, and droughts, actors on vulnerable populations. The year 2 NUR of discussed this topic, exploring the impact of the o engaged with this topic in the mandatory CASN fection assignment assigned in NUR 351, which ion.	

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

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

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

This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	2

The impact of environmental toxins on reproductive health is briefly explored in the mandatory module assigned in NUR 351, "CASN Nursing and Climate Change Module".

1.10. Does your nursing program emphasize the importance of Indigenous and Traditional Knowledge Systems as essential components of planetary health solutions?

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

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

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

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

Score Assigned:

Score explanation:

This topic is explored in NUR 350 in year one, in the mandatory course module "Indigenous Knowledge and Traditional Health", which discusses traditional and Indigenous knowledge and asks students to reflect on how they will honour this knowledge in their future nursing practice. The same course also assigned mandatory listening to a podcast interview with botanist Robin Wall-Kimmerer, entitled "Why is the world so beautiful? An Indigenous botanist on the spirit of life in Everything. Tapestry with Mary Hynes. (Aired November 29, 2020)". This topic is also explored in the mandatory CASN Nursing and Climate Change Module assigned in NUR 351, which contains a section dedicated to the importance of traditional knowledge in promoting planetary health.

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1.11. Does your nursing curriculum address important human-caused environmental threats that are relevant to the university or program's surrounding community?

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

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

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

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

Score Assigned:

2

Score explanation:

This topic was covered in a series of slides in the year 1 course NUR351 Week 10 lecture, "Planetary Health Care & Environmentally Responsible Practice", where the "urban heat island" effect and environmental racism are highlighted. This topic was also briefly addressed in the year 2 course NUR420 Week 10 Haudenosaunee Perspectives on Wellness **guest lecture** given by Deyowidron't [Teri] Morrow– titled "NÊTOGYÉ: NIYÓDQHQ:KQGWÂNIGÓHÂ (SO BE IT IN OUR MINDS)". Morrow highlighted the history and presence of settler colonialism and land theft in so-called Canada as driving forces in the destruction of clean water supplies and hunting and foraging lands for members of Six Nations of the Grand River. The nursing curriculum does not currently address war, deployment of weapons of mass destruction, or military/state enforced mass displacement as increasingly impactful environmental health-caused threats relevant to the university and surrounding communities.

1.12. Does your nursing curriculum address socioeconomic/racial disparities in extreme weather and climate change exposure?

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 covered in a series of slides in year 1 course NUR351 Week 10 where the "urban heat island" effect and environmental racism are highlighted. In NUR390 and NUR461, social determinants of health including income, homelessness, Indigeneity and racism are also discussed in relation to the unequal distribution of exposures to extreme weather. The Spring 2024 NUR390 week 10 (March 18, 2024) lecture on disaster and emergency preparedness discussed the disproportionate risk burden related to increasingly frequent wildfires borne by rural First Nations communities. The NUR461 Week 11 lecture titled "Ecological Determinants of Health: Building Sustainable Communities," explored "disproportionate health impacts of climate change on vulnerable populations" and "impacts of climate change related to heat stress, infectious disease, natural hazards, and droughts."

3

1.13. Does your nursing curriculum address inequitable health impacts of climate change globally?

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

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

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

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

Score Assigned:	3

The NUR351 Week 10 lecture, "Planetary Health Care & Environmentally Responsible Practice," covers governmental efforts like COP28 and the Paris Agreement to attend to nations' unequal contributions to and burdens related to the climate crisis. The NUR461 Week 11 lecture titled "Ecological Determinants of Health: Building Sustainable Communities," does explore "Global Ecological Change" and the impacts of ocean acidification, ecotoxicity, resource depletion, species extinction, and climate change in the context of capitalism and global economic inequity. Students are invited to "Think-Pair-Share" on how marginalised populations are disproportionately exposed to the negative effects of the climate crisis. While global impacts are covered, slide contents primarily foreground the context of Canada.

1.14. Does your nursing curriculum address climate and environmental health challenges that impact marginalized populations and communities?

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:

NUR420 week 5, NUR361 week 9, and NUR461 week 11 lectures address the impacts of climate change on mental health and the specific health risks for people with schizophrenia in extreme heat. NUR461 also explores the disproportionate illness burdens including heat stress and food scarcity borne by racialized, low income, elderly, and homeless populations exposed to climate crisis. NUR390 week 10 (Spring 2024) explores impacts of wildfires and disproportionate exposure for rural First Nations people to smoke/particle inhalation and disruption to treatment regimens for chronic conditions.

3

1.15. Does your nursing curriculum address the impact of environmental degradation due to climate change on marginalized populations and communities?

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

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

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

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

Score Assigned:

2

NUR461 Week 11 Lecture "Responding to the Realities of the Climate Crisis: Building Sustainable and Resilient Communities," addressed the impacts of environmental degradation related to oceanic acidification, drought, and resource extraction. Discussed impacts include species extinction, food scarcity, and heat exhaustion and how vulnerable communities face highest risks. The NUR420 Week 10 **guest lecture** did address how suburban sprawl and the government policies that fund and encourage it degrade the quality of fresh water supplies, forest ecosystems, and the nutrient quality of edible plants and game available to all people but particularly to First Nations people. As mentioned in section 1.11 of this report card, the nursing school curriculum does not yet address how ongoing settler colonialism around the world, war and deployment of weapons of mass destruction contribute to environmental degradation, climate change, and disproportionate health risks borne by those most directly targeted for forced displacement and annihilation.

1.16. Does your nursing curriculum address the outsized impacts of anthropogenic environmental toxins on marginalized populations and communities?

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:

NUR461 Week 11 "Responding to the Realities of the Climate Crisis: Building Sustainable and Resilient Communities," discusses ecotoxicity (Persistent Organic Pollutants including pesticides, industrial chemicals and by products) and health related impacts from exposure like endocrine disruption, fetal anomalies, neurobehavioral impairment, increased cancer risk, and genotoxicity. The full lecture is framed in the context of social determinants of health and increased exposure risks for marginalized populations.

2

1.17. Does your nursing curriculum address the impacts of extreme weather events on healthcare systems?

2

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:

NUR351 Week 10 Lecture 'Planetary Health Care & Environmentally Responsible Practice' discussed the impacts of extreme weather events such as extreme temperatures, droughts, floods, fires, water supply shortages, and poor air quality impacts on health and healthcare systems.

1.18. Does your nursing program 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:

NUR351 included the completion of a CASN Climate Change Module that briefly discussed the carbon footprint of the healthcare system, which also required us to complete a self debrief and reflect on our own carbon footprint. The Week 10 Lecture 'Planetary Health Care & Environmentally Responsible Practice' also discussed the waste generated by care itself and advocated for strategies to decrease the carbon footprint such as virtual appointments where possible, more environmentally sustainable treatment options such as powdered inhalers over GHG containing metered dose inhalers.

2

NUR420 Week 4 had a guest lecture discussing 'Environmental Sustainability' and required reading of Rizan, C., Reed, M., & Bhutta, M. F. (2021). Environmental impact of personal protective equipment distributed for use by health and social care services in England in the first six months of the COVID-19 pandemic. Journal of the Royal Society of Medicine, 114(5), 250-263.

NUR461 Week 11 Lecture 'Responding to the Realities of the Climate Crisis: Building Sustainable and Resilient Communities'.

1.19*. Does your nursing program curriculum or coursework highlight the waste generated by healthcare provision?

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

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

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

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

Score Assigned:

2

Score explanation:

NUR351 Week 10 Lecture 'Planetary Health Care & Environmentally Responsible Practice' described the impacts of plastic waste and the throwaway culture in healthcare, the course also advocated for reducing glove use, and advocating for the use of reusable containers.

NUR420 for Week 11 included required reading of Rizan, C., Reed, M., & Bhutta, M. F. (2021). Environmental impact of personal protective equipment distributed for use by health and social care services in England in the first six months of the COVID-19 pandemic. Journal of the Royal Society of Medicine, 114(5), 250-263.

1.20*. Does your nursing program cover the contributions of pharmaceuticals to environmental degradation and climate change (e.g., anesthetic gases, inhalers, antibiotic resistance, etc.)?

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:

NUR351 Week 10 Lecture 'Planetary Health and Environmentally Responsible Practice' described substituting treatments to benefit the climate. Specifically, it states that metered-dose inhalers (MDIs) contain a potent greenhouse gas and that when possible, we should opt to use alternative dry-powdered inhalers with much smaller carbon footprints.

2

NUR 325 Week 3 Lecture 'Respiratory Disorders' discusses the environmental impact of MDIs and strategies for nurses to mitigate their negative effects.

Besides MDIs, the nursing program did not cover the contribution of other pharmaceuticals like anesthetic gases and antibiotics on climate change.

1.21. Does your nursing school's curriculum introduce strategies for having conversations with patients, nursing home residents, visitors, and other health professionals about the health effects of climate change and other environmental disruptions?

Yes, the **core** curriculum includes strategies for conversing with patients and other health professionals regarding climate change and environmental disruptions. (2 points)

There are **elective** courses that include strategies for conversing with patients and other health professionals regarding climate change and environmental disruptions. (1 point)

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

Score Assigned:

NUR351 is a required course taken in the first year which introduces ways for nurses to contribute to climate action. This includes promoting change on an unit level and institutional level where nurses share reliable climate change information and encourage patients and colleagues to collaborate to raise awareness and advocate for policy changes. However the curriculum currently lacks education on specific strategies for navigating conversations with patients, residents and visitors.

1.22. Does your school have an appointed faculty or staff responsible for planetary health and environmental nursing?

Yes, the nursing program has **at least one** appointed faculty or staff responsible for planetary health and environmental nursing. (1 point)

1

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

Score Assigned:

Score explanation:

Bloomberg Nursing does not have a specific appointed faculty member within the department. However, there is Nursing Faculty presence within the interdisciplinary team of professional health educators at the University of Toronto (Collaborative Centre for Climate, Health, and Sustainable Care)

Dr. Quinn Grundy, RN, PhD - Associate Director for the Collaborative Centre for Climate, Health, and Sustainable Care at the University of Toronto (<u>https://climatehealth.utoronto.ca/people/staff/</u>)

• The Collaborative Centre's purpose is to catalyze climate & sustainability action for health & health systems through research, education, and practice & policy change

Other faculty members part of the Collaborative Centre for Climate, Health, and Sustainable Care:

 Laura Fairley, RN, MN, CHPCN(C), Joanne Louis, NP, MN, Amy Wright, NP, PhD, Lisa Cranley, RN, PhD, Mariana Bueno, RN, PhD, Tieghan Killackey (<u>https://climatehealth.utoronto.ca/people/fellow-directory/?faculty_affiliation%5B%5D=la</u> wrence-bloomberg-faculty-of-nursing)

1.23*. Does your program offer Interdisciplinary Education (IPE) simulations or experiences regarding the health risks of climate change and other environmental disruptions?

Yes, the school of nursing has been involved with IPE simulations or experiences in the **past year**. (2 points)

Yes, the school of nursing has been involved with IPE simulations or experiences in the **past three** years. (1 point)

No, the school of nursing has not been involved with IPE simulations in the **past three years.** (0 points)

Score Assigned:

'Health Impacts of Climate Change: An Interprofessional Response' is an elective IPE learning activity offered during the 2024/25 academic year. It is a three part series (3 sessions) to increase students' knowledge of the health impacts of climate change, learn strategies to address heat and air-related health exacerbations, and explore the disproportionate impact of climate change on the health of marginalized populations. (https://ipecurriculum.utoronto.ca/Activity/Details/2397)

Section Total (51 out of 65)

78%

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Interdisciplinary Research

<u>Section Overview:</u> 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:

The <u>Collaborative Centre for Climate, Health and Sustainable Care</u> at the University of Toronto was launched in November 2023. This newly founded initiative involves four health sciences faculties including the Bloomberg Faculty of Nursing. "This new unit will catalyze research, education, and practice change in clinical care, health system management, health policy, and public health to meet the transformative challenges posed by climate change and the demands of sustainability."

There are nine faculty members from the Faculty of Nursing that are affiliated with this initiative according to the <u>Fellows Directory</u>. These faculty members and their research areas of interest include:

- Dr. Mariana Bueno, RN, PhD, Assistant Professor, Tenure Stream
 - *Health/clinical domains, knowledge translation and implementation, maternal and child health.*
- Dr. Lisa Cranley, RN, PhD, Associate Professor
 - Health equity; health policy, services & systems; knowledge translation and implementation; quality improvement; sustainability transitions; gerontology and care of older adults; health workforce; leadership and innovation; models of care; infrastructure/built environments; sustainable/resilient models of care; health professions (undergraduate, post-grad); health sciences (undergraduate, graduate); simulation-based education.
- Laura Fairley, RN, MN, CHPCN(C), Assistant Professor, Teaching Stream
 Disaster and emergency management/preparedness, health education, health

equity, planetary health, palliative care, primary care.

- Dr. Quinn Grundy, RN, PhD, Assistant Professor
 - Health policy, services & systems; health systems, services & settings; political science/policy studies; social & structural determinants of health; sustainable, resilient, low carbon health services & systems; pharmaceuticals/health technologies
 - "[Grundy] leads a program of research to understand the promotional activities of the medically-related industry and their implications for sustainable healthcare."
- Dr. Tieghan Killackey, RN, PhD, Assistant Professor
 - *Health/clinical domains; health education; health policy, services & systems; health systems, services & settings; knowledge translation and implementation; cardiovascular disease; chronic diseases; acute care; appropriate care; health professions (undergraduate, post-grad).*
- Joanne Louis, NP, MN, Assistant Professor, Teaching Stream
- Health professions (undergraduate, post-grad), migration and displacement.
- *Reese Olsthoorn, MN, NP, CON(C)*
 - Pharmacology; integrated care; quality improvement and patient safety; acute care; leadership and innovation; primary care; pharmaceuticals/health technologies; models of care; home & community care/long term care; reproductive health; appropriate care; social care; sustainable/resilient models of care; waste management and reduction; practice-based education; leadership education; rehabilitative care; palliative care; health education; health systems, services & settings; psychology; quality improvement; anatomy and cell biology; knowledge translation and implementation; informatics/health informatics; sustainable, resilient, low carbon health services & systems; health/clinical domains; cancer; global health; community/patient/public engagement; bioethics; health promotion/prevention; gerontology and care of older adults; radiotherapy/radiation; surgical/perioperative care; migration and displacement .
- Jean Wilson, HBScN, MHSc, NP-PHC, Assistant Professor
 - Disaster and emergency management/preparedness; infectious diseases/infection control; health sciences (undergraduate, graduate); environmental/life cycle assessment; primary care; population health management; health promotion/prevention; public health/preventive; environmental epidemiology; health education; environmental/climate justice; global health; health/clinical domains; sustainable, resilient, low carbon health services & systems; health equity; health systems, services & settings; practice-based education.
- Dr. Amy L. Wright, PhD, NP-Pediatrics, Assistant Professor
 - Global health; health/clinical domains; health equity; health policy, services & systems; health systems, services & settings; indigenous knowledge systems and practices; knowledge translation and implementation; social & structural determinants of health; health promotion/prevention; maternal and child health; neonatology.

Based on the University of Toronto's Medicine PHRC team, within the Temerty Faculty of Medicine, there are some researchers whose primary focus is in planetary health, including <u>Dr.</u> <u>Edward Xie</u> and <u>Dr. Samantha Green</u>. There are also other researchers who are involved in planetary health research but not as a primary focus.

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:

Score explanation:

The Collaborative Centre for Climate, Health and Sustainable Care (CCCHSC) is a dedicated multi-faculty academic unit at the University of Toronto bringing together four faculties which include the Dalla Lana School of Public Health, the Temerty Faculty of Medicine, the Lawrence Bloomberg Faculty of Nursing, and the Leslie Dan Faculty of Pharmacy. In terms of research, the program is working to cultivate <u>"Research Clusters"</u> that encompass specific topics of research from the different faculties and bring them together and they include:

3

- 1) Pharmaceuticals and the Environment
- 2) Sustainable Digital Health Transformation
- *3) Mental Health in the Anthropocene*
- *4) Equitable Urban Climate Resilience*

They also launched a <u>monthly Journal Club</u> to explore the work of others and the work in progress of current members. They also provide <u>support and services</u> such as sharing information about funding, providing enabling capacity for use in grant, award and fellowship applications (coming soon), sharing information about your research, and additional support. They are also focused on providing <u>Seed Grants</u> through competition to encourage collaboration in research with the TAHSN centres. They award up to 5 seed grants of a maximum of \$10,000 each.

They also offer <u>summer student funding</u> for full-time students with a focus on research, quality improvement, or practicum experiences that relate to the Collaborative Centre's purpose.

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:

<u>Centre for Community Partnerships</u>: Collaborate with community partners, students, faculty, and staff to advance community-engaged learning and research (CEL/R) through building community, enhancing capacity, and learning together. Through the Centre, students participate in a structured research experience in partnership with communities or grassroots, non-profit or public organizations. The research project and methodology are driven by community partner priorities and provide reciprocal benefits to those partners and the students engaged with them. The focus isn't explicitly on planetary health, but students are able to choose partnerships in this area.

MAP Centre for Urban Health Solutions: Led by Dr. Stephen Hwang, Temerty Medicine, <u>MAP</u> is Canada's largest research centre focused on health equity and the social determinants of health. The MAP team of scientists focuses on program and policy interventions to advance health equity, and are increasingly interested in climate resilience in urban environments.

One initiative through MAP is OurCare, a research study being led by Dr. Tara Kiran, a leading Canadian primary care researcher. This study will facilitate dialogue among members of the public—particularly newcomers and those living with a low income—to understand how they define good primary care, what care should look like, and what policy changes they recommend to shape the system.

Another initiative run through MAP is the Community Scholar Program, which brings community experts and scientists together to develop and test solutions that directly address community priorities and needs. For a one-year period, Community Scholars work with MAP scientists, staff and students, and others at Unity Health Toronto to develop a full-time, independent program of research.

The CERC Network for Equity in Sustainability Transitions: Led by Dr. Paty Romero-Lankao, Canadian Excellence in Research Chair for Sustainability Transitions and Professor of Sociology, UofT Scarborough, CERC NEST uses a transdisciplinary and comparative approach with communities and city actors in Toronto, Los Angeles and Mexico City to envision community aspirations for addressing climate vulnerabilities and empowering action to enable and catalyze equity in urban sustainability transitions in Canada and worldwide. The CERC Network is running a community science initiative that will combine air quality monitoring by residents, and by Dr. Arthur Chan's lab, with vulnerability analysis. This will create actionable knowledge to mitigate wildfire-associated health risks such as those experienced by Toronto residents in the summer of 2023.

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:

The <u>Collaborative Centre for Climate, Health & Sustainable Care</u> website centralises climate and health research affiliated with UofT. The website is very easy to use, up-to-date, and comprehensive on current initiatives.

The events listed on the website include a Climate & Health Seminar Series and the Annual Symposium. The website also has an easy to navigate directory of fellows that list faculty and scientists, professionals, practitioners and leaders who are engaged in work related to climate, environment, health and sustainable care. Along this line, the Initiatives section of the website highlights many interdisciplinary and cross-institutional initiatives related to planetary health that affiliates of UofT are involved with, and showcases leaders at our institution. Under the Research section of the website, there are Seed Grants and Summer Student Funding opportunities through the university, along with links to external funding options.

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:

A student-led nursing Global Health Conference was held on January 15, 2024. The keynote speaker was Fiona Hanley, founding member of the Canadian Association of Nurses for Health and the Environment (CANE). Hanley talked about climate change, its impact on health, and how nursing leadership can affect climate change.

4

Other breakout sessions included:

- Navisha Weerasinghe and Shugri Nour how the current healthcare system contributes to climate change and proposed solutions related to nursing.
- Josalyn Radcliffe and Emma Ayukawa talked about Ontario Nurses for the Environment Interest Group (ONEIG), an interest group that is a part of the RNAO (Registered Nurses Association of Ontario) and what they do.
- Natania Abebe and Expert Panel Discussed and showed a film about climate change and mental health.

The Lawrence Bloomberg Faculty of Nursing is one of the four founding health sciences faculties for the Collaborative Centre for Climate, Health and Sustainable Care. This centre hosted their first Climate, Health and Sustainable Care Inaugural Symposium on October 22nd, 2024, and is set to host the <u>2025 symposium</u> on October 30th, 2025.

Dr. Quinn Grundy from the Lawrence Bloomberg Faculty of Nursing <u>serves as the Associate</u> <u>Director</u> for the Collaborative Centre for Climate, Health and Sustainable Care.

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

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

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

Score Assigned:

Score explanation:

The University of Toronto's Collaborative Centre for Climate, Health, and Sustainable Care is one of the four founding members of <u>CASCADES Canada</u>. CASCADES works and learns from many other organizations across the Canadian provinces and territories making it a national planetary health and ESH organization. Their mission is to strengthen the capacity of the healthcare community across Canada to transition towards high-quality, low-carbon, sustainable and climate resilient care based on their website.

1

The Dalla Lana School of public Health is listed as a member of the <u>Planetary Health Alliance</u>.

Bloomberg Faculty of Nursing employs several faculty members who are individual paying members of the Canadian Association of Nurses for the Environment (CANE). Upon review of available membership options, there is not one listed that would allow the entire organization to be included as a member nor does the Bloomberg Faculty of Nursing meet requirements to be considered a partner organization. However, there is a membership option available for students of \$15 annually or a prorated \$38 for 3 years. Bloomberg subscribes to other organizations on behalf of students (Nurse Achieve) and can show their support by partnering with CANE as an organization to ensure student membership and promote the benefits of student membership such as voting within nursing school curriculum.

Bloomberg Faculty of Nursing is not a member of the Global Consortium on Climate and Health Education despite fellow Canadian schools listed as supporting members. Within the University of Toronto, the following faculty are listed in the Global Member Network:
Dalla Lana School of Public Health

Upon inspection, membership of an Academic Institution requires a Google Form to be filled out by faculty and an optional sliding scale donation meaning membership is well within reach for Bloomberg Faculty of Nursing.

Section Total (16 out of 17)

94%

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Community Outreach and Advocacy

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

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

1

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

Score Assigned:

Score explanation:

The Lawrence Bloomberg Faculty of Nursing is affiliated with the Toronto Academic Health Science Network (TAHSN), a coalition of leading health organizations renowned for their cutting-edge teaching, research, and clinical care. Together, the two institutions have launched the Sustainable Health System Community of Practice (CoP) to address the challenges facing the health sector and its impact on climate change. The CoP's mission is to transform healthcare services to be more environmentally sustainable, minimizing their negative impact on the environment while maintaining the highest standards of care.

The Lawrence Bloomberg Faculty of Nursing at the University of Toronto is partnered with CASCADES, an organization dedicated to supporting, researching, and implementing sustainable healthcare policies and practices across Canada. Through its efforts, CASCADES strives to deliver high-quality, climate-resilient, and low-carbon healthcare.

The Lawrence Bloomberg Faculty of Nursing partners with the Dalla Lana School of Public Health, the Temerty Faculty of Medicine, and the Leslie Dan Faculty of Pharmacy to form the Collaborative Centre for Climate, Health & Sustainable Care. This academic unit is committed to advancing research, education, and innovative solutions across key areas such as clinical care, health system management, health policy, and public health. Its mission is to address the profound challenges posed by global ecological changes, helping these fields adapt and respond effectively to emerging health and environmental concerns. The Centre plays a pivotal role in analyzing and addressing the health sector's contribution to climate change, working through education, research, and the development of practical strategies to tackle identified climate-related health issues. While the University of Toronto is not partnered with any <u>community organizations</u> to promote planetary and environmental health, the Collaborative Centre for Climate, Health & Sustainable Care has initiatives running through the community to support planetary health:

- "The CERC Network for Equity in Sustainability Transitions: The CERC Network is running a community science initiative that will combine air quality monitoring by residents, and by Dr. Arthur Chan's lab, with vulnerability analysis. This will create actionable knowledge to mitigate wildfire-associated health risks such as those experienced by Toronto residents in the summer of 2023."
- "Urban Futures & Community Climate Resilience: This partnership grant is also supporting work with the Community Development Unit, Social Development, Finance & Administration at the City of Toronto to host a Community Climate Resilience Roundtable: Health, Wellbeing & Health Equity in December 2024. This roundtable will convene and connect key actors working on community climate resilience from an equity, health, and wellbeing perspective in the Greater Toronto area."
- "<u>Strengthening healthcare's contribution to city-led climate action:</u> Exploring the potential of partnerships to identify and explore specific opportunities for the healthcare sector to support city-led climate action by building city-healthcare partnerships. To reach our goal, we will pursue three specific objectives:
 - Develop and share usable resources that synthesize co-created knowledge on selected topics to support cities and healthcare to pursue collaborative climate action.
 - Identify and engage with critical scholarly questions about sustainability transitions, urban climate governance and multi-level governance in order to assess how intentional engagement between healthcare and cities can support city-led climate action.
 - Deepen existing partnerships and engage new partners in preparation for application for a SSHRC Partnership Grant. This partnership initiative builds on the work of the Toronto Academic Health Science Network (TAHSN) Sustainable Health System Community of Practice, which is a climate-engaged health network across Toronto and Mississauga affiliated with the University of Toronto."

Based on the last initiative, it seems like UofT is planning to partner with community organizations within the city of Toronto.

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

1

Score Assigned:

Score explanation:

The Lawrence Bloomberg Faculty of Nursing continues to be a partner in the Collaborative Centre for Climate, Health, and Sustainable Care. For the Lawrence Bloomberg Faculty of Nursing, their role is to respond to the Strategic Academic Plan's commitment to social justice and innovation in education and research. Additionally, Quinn Grundy, RN, PhD, and Assistant Professor in this faculty, is an Associate Director of the Collaborative Centre for Climate, Health, and Sustainable Care. In addition, Dr. Grundy is the Director of the World Health Organization Collaborating Centre for Governance, Accountability, and Transparency in the Pharmaceutical Sector at the University of Toronto, and leads a program of research to understand the promotional activities of the medically-related industry and their implications for sustainable healthcare.

Among many other events and initiatives, the Collaborative Centre for Climate, Health, and Sustainable Care hosts a Climate & Health Seminar Series which brings together international and local experts through seminars, workshops and roundtables, working in partnership with other centres of excellence. For example, in January of 2025, some seminar topics included The Early Ethics of Planetary Health and Climate Change & Youth Mental Health which were both open for public attendance. From February 2024 to February 2025, the Lawrence Bloomberg Faculty of Nursing has been an organizer for some of these seminars. However, after reviewing their event schedule and the descriptions of the events, the only ones hosted by the Lawrence Bloomberg Faculty of Nursing were those under the Health Inc. Corporations, Capitalism, and the Commercial Determinants of Health series. Although very relevant to health and creating awareness to global healthcare access disparities, this series does not focus on planetary health as defined by the Planetary Health Alliance.

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:

Although the Bloomberg Nursing website features coverage of planetary health events, only one event has focused on this topic during this report year. This coverage spotlights current graduate student research on the ongoing climate crisis but does not contribute to sustainable healthcare efforts in place at the university. Email communications sent by the Nursing Undergraduate Society and Bloomberg Nursing Communications fail to dedicate regular coverage related to planetary health or sustainable healthcare.

0

3.4. Does the <u>institution</u> or <u>main affiliated hospital trust</u> engage in professional education activities targeting individuals post graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare remain up to date during their professional career?

Yes, the **institution** or **main affiliated hospital trust** offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health. (2 points)

Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers. (1 point)

1

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

Score Assigned:

Score explanation:

Bloomberg Nursing incorporates some knowledge in planetary health and sustainable healthcare in the curriculum but does not offer anything for individuals post-graduation. Bloomberg Nursing does offer certifications and courses for post-graduates called Bloomberg Nursing's Centre for Professional Development, with a variety of courses ranging from health assessment to mental health, however, there are no courses on the topic of planetary or sustainable health. Bloomberg Nursing does offer a Climate Health and Sustainable Care Student Training Program (CASCADES) offered to current and professional graduates alike. This training program aims to help students "develop knowledge and research skills on the links between climate and ecological change, health, health systems & sustainability". It is a one year non-credit certificate program, and students may also receive a stipend of up to \$1500 for completing the course.

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 **nursing school** 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 medical centres have accessible educational materials for patients. (0 points)

Score Assigned:

Score explanation:

The Lawrence Bloomberg Faculty of Nursing does not directly provide educational materials for patients about environmental health exposures. However, some affiliated teaching hospitals do provide some material for patients.

1

- Women's College Hospital has an environmental health clinic that covers various topics related to promoting environmental health. Online articles are available to read for example, creating a healthy environment at home and minimizing contaminants
- The Hospital for Sick Children also has some online resources for patients and families on their About Kids Health learning hub. Topics covered include how to protect kids from environmental exposures such as lead.

3.6. Does your institution or its affiliated teaching hospitals have accessible educational

materials for patients about the health impacts of climate change?	
Yes, the nursing school 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:	1
 Score explanation: The Lawrence Bloomberg Faculty of Nursing doe. patients about The health impacts of climate chan do provide some material for patients. Sunnybrook provides a variety of patient of Matters blog. This includes posts about cu Climate Change on the Senior Population change on health and anxiety". Sunnybrook also provides patients with an one from their speaker series that covers to watch with topics such as "What a Wan Transmission". 	s not directly provide educational materials for ge. However, some affiliated teaching hospitals education materials through their Your Health limate change, for example: "The Impact of a" and "The far-reaching effects of climate ccess to Webinars through their website, there is Climate change and heath available for patients rming Planet Means for Virus and Disease

Section Total (5 out of 14)

36%

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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:

The Collaborative Centre for Climate, Health, and Sustainable Care, established by the Dalla Lana School of Public Health, Temerty Faculty of Medicine, Lawrence Bloomberg Faculty of Nursing, and Leslie Dan Faculty of Pharmacy strives to drive research, education, practice, and partnerships that promote positive environmental and social change in health and health systems, both locally and globally. In 2024, the Centre launched Seed Grants of up to \$10,000 to support collaborative research that aligns with its mission and partner goals. Funding may be used for activities such as data collection, environmental scans, workshops, and research development in areas like policy analysis, quality improvement, health education, and community engagement.

2

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)

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

Score Assigned:

The **Rosenstadt Research Development Program at Bloomberg nursing** offers nursing students the opportunity to engage with a faculty member's program of research from September to March and participate in formalized research development sessions. This is a part-time research opportunity part of the work study program at the University of Toronto. Accepted students work roughly 10-12 hours per week over the program duration and receive compensation of \$19/hour. For the September 2024 year, there is one research assistant position related to sustainability in healthcare. This position is under Dr. Shefali Ram, and focuses on developing policies to mitigate the adverse impact of plastic use in the pharmaceutical industry. More information on the program can be found <u>here</u>.

The Collaborative Centre for Climate, Health, and Sustainable Care at the University of Toronto is offering funding up to \$2500 to its members to hire full-time students for summer 2025 with a focus on research, quality improvement, or practicum experiences. The centre's purpose is focused on climate and sustainability action for health and health systems through engagement in research, education, and practice and policy change. Four faculties are involved in this initiative, one of which is the Lawrence Bloomberg Faculty of Nursing. Students can apply to be a part of a project that focuses on four main research clusters: pharmaceuticals and the environment, sustainable digital health transformation, mental health in the Anthropocene, and equitable urban climate resilience. More information on this centre can be found here. The University of Toronto offers specific opportunities related to planetary health and sustainable healthcare through initiatives like the Planetary Health Certificate Program and the new Academic Centre for Global Ecological Change. The Planetary Health Certificate Program, launched by the University of Toronto's Continuing Professional Development (CPD), aims to educate healthcare professionals about the intersection of health and the environment, focusing on the effects of ecological change on human health. This certificate program allows students and professionals to engage in educational modules and practical learning on planetary health, making it a formal offering in this space. More information on the program can be found here.

Additionally, the Academic Centre for Global Ecological Change brings together four health sciences faculties at the University of Toronto to address issues related to global ecological change. This initiative unites diverse health disciplines to foster collaboration on planetary health challenges and provides students with opportunities to engage in interdisciplinary research and education on these topics. More information about this centre can be found <u>here</u>.

4.3. Does the <u>institution</u> have a web page where students can find specific information related to planetary health and/or sustainable healthcare/vetcare activities and mentors within the institution? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.

The institution has a 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:

0

Score explanation:

Currently, the institution has no dedicated web page specifically designed for students to find planetary health or sustainable healthcare activities and mentors within the institution. While the university has created websites to search for webinars seminars and presentations at Climate, **Health + Sustainable Care**. This website unfortunately has no affiliation with Lawrence S. Bloomberg Faculty of Nursing making it very difficult for students to easily access projects, contact details for mentors. Due to the lack of available activities and mentors in the institution students may need to look through various departments or programs to discover opportunities.

Based on the explanation, a score of 0 points must be given due to the lack of a dedicated webpage for planetary health or sustainable healthcare that displays activities and mentors within the institutions.

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:

At the University of Toronto's Lawrence S. Bloomberg Faculty of Nursing, the **Nursing Undergraduate Society(NUS)** serves as the primary student organization representing nursing undergraduates. While NUS focuses on various aspects of student life, there isn't specific information indicating a dedicated group solely for planetary health engagement, scholarships and advocacy within the faculty. Though it is likely in the future NUS may create events and opportunities associated with planetary health it is unclear when this will occur.

1

The University of Toronto has a portal for recognized student groups which includes groups that focus towards a culture of planetary health engagement, scholarship, and advocacy on campus, but there is no evidence if faculty is directly involved or if faculty provides support directly as the **University of Toronto's Student Union (UTSU)** usually provides support for most groups or clubs. Students groups who focus and promote directly or indirectly with planetary health include:

- Bikechain
- Climate Justice UofT: The Student Voice on Environmental Justice
- Elementree
- Formula For Our Future (TFFOF)
- Green Chemistry Initiative (GCI)

- Green Leading Club U of T
- Innis Garden Club
- Into the Woods (ITW)
- Paw Pals Rescue Club (PPRC)
- Plant Based Treaty UofT Student Association
- Regenesis Environmental and Community Initiatives UofT (St. George) Student Chapter
- The University of Toronto Veg Club
- University of Toronto Student Environmental Resource Network (UTERN)
- UofTrees Student Club

Therefore, based on the explanation the score for this criteria is 1.

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)

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

Score Assigned:

1

Score explanation:

The Sustainability Offices across the three campuses are dedicated to fostering a culture of sustainability through diverse initiatives that engage local communities. Serving as hubs for sustainability awareness, services, and collaboration, they empower students, faculty, and staff to drive positive change both on and off campus. However, the University of Toronto's Lawrence S. Bloomberg Faculty of Nursing currently lacks a student liaison on the Student Leadership Subcommittee (SLS). This subcommittee amplifies student voices within CECCS, strengthens collaboration, and advances student-led initiatives aligned with CECCS's broader mission. Like other CECCS subcommittees, the SLS is a standing working group responsible for identifying, developing, and delivering sustainability initiatives with support from the Secretariat and key partners.

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.	0

Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	1
Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	1
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1
Score explanation:	

The Lawrence S. Bloomberg Faculty of Nursing, through the Nursing Undergraduate Society (NUS), actively engages students in planetary health initiatives. The NUS Nursing Wellness Retreat offered winter activities on a farm, fostering nature connection and sustainability awareness. The Global Health Nursing Conference addressed global and environmental health issues, while the Global Health Conference Art Contest encouraged sustainability-focused artistic expression. The NUS partnered with UofT Run Club for a 5k charity run benefiting Yonge Street Mission and organized the Equity Team's Holiday Drive, both supporting community resilience. Additionally, the retreat promoted outdoor engagement and well-being. However, no specific events focused on direct engagement with local environmental justice communities.

These initiatives reflect the faculty's commitment to sustainability through student-led activities. The conference and art contest raised planetary health awareness, while the 5k run and holiday drive supported community resilience. The retreat reinforced well-being and environmental consciousness. Expanding direct environmental justice initiatives could further enhance impact.

Section Total (11 out of 15)

73%

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Campus Sustainability

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

5.1. Does your 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:

Score explanation:

The University of Toronto has a Sustainability Office that serves the entirety of St. George campus, and is run by a team of at least 12 full-time employees. Roles include Directors, Senior Managers, Senior Utilities Reduction Managers, Project Managers, Energy Managers, and Administrative Assistants. The team also consists of at least six students who have taken on a range of roles, including Sustainability Engagement and Outreach Assistants. There is, however, no specific staff member that is responsible for sustainability as it pertains to hospital placements for University of Toronto students.

2

Source: https://www.fs.utoronto.ca/sustainability/

5.2. How ambitious is your institution's plan to reduce its own carbon footprint?

The institution has a written and approved plan to achieve carbon neutrality by 2030 (5 points)

The institution has a written and approved plan to achieve carbon neutrality by 2040 (3 points)

The institution has a stated goal of carbon neutrality by **2040** but has **not created a plan** to reach that goal or the **plan is inadequate** (1 point)

The institution/medical school does **not** meet any of the requirements listed above (0 points)

Score Assigned: 0

University of Toronto aims to be Climate Positive by 2050, with a goal of reducing 80% of all absolute carbon emissions on campus. There is no plan in place to achieve carbon neutrality prior to 2040.

Source: https://climatepositive.utoronto.ca/

Although the University of Toronto has implemented a plan to reduce the rate of carbon reduction by 50% by 2030, this estimated reduction rate does not fulfil the 2040 goal of complete carbon neutrality. The University plans to upgrade the campus by implementing project LEAP- a project that aims to reduce fossil fuels emissions used for heating by 75%. They plan to target high energy consuming buildings by re-using heat in major buildings by 45% through re-using heat that would normally be wasted. Energy efficient LED lighting is also being added to roughly 35 buildings on campus while plans to connect more than 75 buildings to a geoexchange system. These changes are intended to reduce carbon emissions by half by 2027.

(https://www.utam.utoronto.ca/wp-content/uploads/2024/06/2023-UTAM-Carbon-Footprint-Report .pdf; U of T to cut carbon emissions in half on St. George campus by 2027 | University of Toronto)

5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?

Yes, institution buildings are 100% powered by renewable energy. (3 points)

Institution buildings source >80% of energy needs from off-site and/or on-site renewable energy. (2 points)

Institution buildings source >20% of energy needs from off-site and/or on-site renewable energy. (1 point)

Institution buildings source <20% of energy needs from off-site and/or on-site renewable energy. (0 points)

1

Score Assigned:

Score explanation:

University of Toronto plans to reduce greenhouse gas emissions by more than 50% by using more sources of renewable energy for research, innovation and teaching missions, with CIB partnership. Source: <u>https://www.utoronto.ca/news/u-t-partners-canada-infrastructure-bank-boost-climate-positi</u> <u>ve-efforts</u>

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 **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)

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

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

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

Score Assigned:

2

Score explanation:

The following document goes into detail about the design standards required to ensure that each campus building adheres to the efforts of the University of Toronto's goal to improve campus sustainability: <u>Environment-Design-Standard-March-2018.pdf</u>

This document touches upon the requirement for buildings to minimize water use, energy use, and reduce waste production, and prevent hazardous emissions and effluents. This standard for sustainable buildings on campus has been implemented since 2020 which also addresses retrofitting old buildings. It is unclear what percentage of UofT buildings have already been retrofitted however, the collaboration with CIB is providing \$50 million of funding to retrofit the campus infrastructure (University of Toronto Retrofits | Canada Infrastructure Bank (CIB)).

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)

1

Score Assigned:

Score explanation:

Nursing students utilize various modes of transportation to commute to classes and clinical settings. Although gas-powered, University of Toronto offers shuttle buses between the St. George and Mississauga campus, running at 20 minute intervals. The use of shuttle buses obviates the need for single-passenger cars. The school further encourages students to bike to campus by promoting the bike-sharing program operated by the City of Toronto which allows for bike rentals near the campus at affordable rates. Furthermore, the university promotes the BikeChain non-profit service which makes bike maintenance and repairs more accessible to students, promoting the use of bikes as a method of transportation; However, many transportation services provided by the City of Toronto to reduce the carbon footprint are not well-advertised by the school. The City offers students a discounted Toronto Transit Commission Pass for sustainable transportation via the subway and streetcars at a discounted rate. Furthermore, nursing students at University of Toronto find it challenging to access off-campus clinical through the use of public transportation; Students are limited to public transportation options due to early, odd clinical start times, and often resort to

driving and utilizing third party car services to get to their desired location. Information about environmentally-friendly transportation is not well-emphasized to nursing students during orientation, or by the University of Toronto as a whole. Environmentally-friendly transportation strategies are not well-utilized by the students. Source:

- <u>https://future.utoronto.ca/university-life/transportation/#:~:text=The%20Toronto%20Trans</u> <u>it%20Commission%20(TTC)%20runs%20several%20buses%20right%20onto.on%20TTC</u> <u>%20Student%20Monthly%20Metropasses</u>.
- <u>https://bikesharetoronto.com/</u>
- <u>https://bikechain.ca/</u>

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)

2

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

Score Assigned:

Score explanation:

The Lawrence Bloombergy Faculty of Nursing located at the Health Science building utilizes the organic recycling and conventional recycling program offered by the University of Toronto. The building has multiple recycling and waste bins located on all 7 floors of the building that are easily accessible to students and faculty members. Compost bins are located in the kitchen and cafeteria of the building where most students utilize during break periods. The waste management program facilitates convenient pick and drop of waste products, such as batteries, coffee cups, cardboard, e-waste, organic waste, and more. The service is easily accessible to all students and faculty. Source:

https://www.fs.utoronto.ca/services/waste-management-and-recycling/what-we-recycle/

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	

Purchase significant amounts of locally sourced items. Established guiding principles to support the community through sustainable local food suppliers. Promote sustainability and wellness by offering support to health of the community through food service, partnership with local food suppliers, education programs on nutrition awareness (e.g. vegan and vegetarian meals) Source:

- https://foodservices.utoronto.ca/wp-content/uploads/U-of-T-Envision-Strategies-Final-Rep ort.pdf
- https://foodservices.utoronto.ca/news/university-of-toronto-food-services-envision-report/
- https://foodservices.utoronto.ca/about/sustainability/
- https://foodservices.utoronto.ca/wp-content/uploads/Food-Services-FAO.pdf

5.8. Does the institution apply sustainability criteria when making decisions about supply procurement?

Yes, the institution has adequate sustainability requirements for supply procurement and is engaged in efforts to increase sustainability of procurement. (3 points)

There are sustainability guidelines for supply procurement, but they are insufficient or optional. The institution is engaged in efforts to increase sustainability of procurement. (2 points)

There are sustainability guidelines for supply procurement, but they are **insufficient or optional**. The institution is not engaged in efforts to increase sustainability of procurement. (1 point)

There are **no** sustainability guidelines for supply procurement. (0 points)

Score Assigned:

2

Score explanation:

Although the procurement process at UofT includes a general statement addressing the necessity of taking on an environmental stance for procurement activities, the requirements specific to adequate sustainability are extremely lacking and unspecific.

Source: University of Toronto Procurement Policy - Procurement Services

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)

1

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

Score Assigned:

The sustainability office has a sustainable events program which lists the best practices for large and small events. This includes selling digital tickets, hosting the event outdoors, reusing table linens and decors, and organizing a carpool et..c The program overlooks sustainable behaviours regarding permitting & set-up, food sourcing & waste, material waste, entertainment and closing/take down.

However, these guidelines are not required to be followed and are up to the event's host to implement them or not

Source: https://www.fs.utoronto.ca/sustainability/sustainable-change-programs/sustainable-events/

5.10. Does your <u>institution</u> have programs and initiatives to assist with making lab spaces more environmentally sustainable?

Yes, the institution has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable. (2 points)

There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)

There are **no** efforts at the institution to make lab spaces more sustainable. (0 points)

Score Assigned:

Score explanation:

The sustainability office has developed a sustainable labs program implemented through all lab spaces at University of Toronto, which consults with students, faculty and staff to create guidelines for sustainable behaviours for all lab users. The program is divided into six sectors to promote environmentally friendly actions including energy conservation, water conservation/management, waste reduction, chemical management, procurement, lab culture.

2

In addition, individual departments have their own initiatives to make their lab spaces more environmentally sustainable. For example, the Simulation Lab (in accordance with the Lawrence Bloomberg Faculty of Nursing) will reuse supplies for teaching such as wound dressing kits, catheters, saline locks and venipuncture training pads and will only replace them when their functionality has been lost. They will also encourage students to take their used supplies (i.e. sterile gloves, IV bags, injections) home with them to reuse for practice rather than investing in new supplies each time. Any remaining supplies such as plastic trays are recycled. Going forward it'll be beneficial to limit single use plastics and invest in biodegradable and low plastic options as they become readily available.

The Nursing Undergraduate Society also holds annual scrub drives which provide students with scrubs (uniform required to participate in the simulation lab) for free.

Source: <u>https://www.fs.utoronto.ca/sustainability/sustainable-change-programs/sustainable-labs/</u> https://www.instagram.com/uoftnus/p/C15fpACRTnw/?hl=en

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

The institution is **entirely divested** from fossil fuels **and** has made a **commitment to reinvest divested funds** into renewable energy companies or renewable energy campus initiatives. (4 points)

The institution is **entirely divested** from fossil fuels. (3 points)

The institution has **partially divested** from fossil fuel companies **or** has made a **commitment to fully divest**, but **currently** still has fossil fuel investments. (2 points)

The institution has **not divested** from fossil-fuel companies, but faculty and/or students are **conducting organised advocacy** for divestment. (1 point)

Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to change that. (0 points)

Score Assigned:

2

Score explanation:

The University of Toronto has divested from all direct investments in fossil fuel companies and plans to reduce any indirect exposure. Re-investment into more sustainable initiatives has been initiated.

Source:

- <u>https://www.utam.utoronto.ca/investing/climate-commitments/</u>
- April-30-2024-U-of-T-Endowments-Annual-Financial-Report.pdf

Section Total (17 out of 32)

53%

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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%

Planetary Health Grades for the University of Toronto School of Nursing

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(51/65) \ge 100 = 78\%$	B+
Interdisciplinary Research (17.5%)	(16/17) x 100 = 94%	А
Community Outreach and Advocacy (17.5%)	(5/14) x 100 = 36%	D+
Support for Student-led Planetary Health Initiatives (17.5%)	(11/15) x 100= 73%	В
Campus Sustainability (17.5%)	(17/32) x 100 = 53%	С
Institutional Grade	(0.78x0.3 + 0.94x0.175 + 0.36x0.175 + 0.73x0.175 + 0.53x0.175) = 68%	В

Report Card Trends

Section Overview

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



Academic Year