



**NURSING**

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# **Planetary Health Report Card (Nursing): Trinity Western University**

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**TRINITY WESTERN  
UNIVERSITY**

2024-2025 Contributing Team:

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[Land acknowledgment](#): Since time immemorial, all campuses of Trinity Western University are home to the Indigenous peoples. Trinity Western's main campus in Langley is located on the traditional ancestral unceded territory of the Stó:lō people. Land acknowledgment is respectfully honouring our relationship with Indigenous people. It is acknowledging our shared history, our present relationship, and our commitment to continue to walk together in a good way.

It is understood in Stó:lō teachings that the land is a gifted inheritance from our ancestors with a responsibility to gift to future generations. Unceded means that the Sto:lo people have never ceded or surrendered title to our lands, our rights to resources, or our authority to make decisions within our territory. Our shared history reveals a broken relationship, but as all Canadians commit to hear the truth, to acknowledge that injustice has prevailed, and learn to walk together to find ways to reconcile, then all of our lives will be enriched.

## Summary of Findings

Overall Grade	A
Curriculum	A+
<ul style="list-style-type: none"> <li>Trinity Western University School of Nursing (TWU SoN) has undergraduate and graduate courses of Planetary and Global Health that are thoroughly within the curriculum. The curriculum does not fully address the impact of climate change on mental health or how extreme weather events affect healthcare systems.</li> <li><b>Recommendations:</b> To encourage comprehensive Planetary Health integration in the core curriculum, we recommend that the missing metrics be presented to necessary TWU SoN faculty (primarily professors on NURS 127, NURS 227, and NURS 317)</li> </ul>	
Interdisciplinary Research	A
<ul style="list-style-type: none"> <li>The faculty and students at TWU SoN are extensively involved in planetary health research and scholarship, including knowledge translation and dissemination. However, there is currently no way that those disproportionately impacted by climate change can make decisions regarding the research agenda.</li> <li><b>Recommendations:</b> We recommend that faculty and students at TWU SoN sustain their efforts in ongoing research and knowledge dissemination on planetary health.</li> </ul>	
Community Outreach and Advocacy	A+
<ul style="list-style-type: none"> <li>Current community outreach and advocacy with regards to planetary health and sustainability initiatives has improved since the 2023-24 PHRC. Community-based initiatives are plentiful within a variety of institutional departments, which are increasingly being accessed by undergraduate nursing students.</li> <li><b>Recommendations:</b> we recommend health authority documents regarding the impact of climate change on health are introduced to students as valuable teaching tools for their patients.</li> </ul>	
Support for Student-Led Initiatives	A
<ul style="list-style-type: none"> <li>There is sufficient support within the SoN for student-led initiatives but it lacks practical opportunities for specific student-led planetary health initiatives and planetary health research. Nonetheless, opportunities for undergraduate research exist through the TWU Undergraduate Student Research Awards, which a number of nursing students access each year.</li> <li><b>Recommendations:</b> We recommend that the PHRC Contributing Team collaborate with faculty and other campus clubs such as Trinity Western Environmental Club (TWEC) in creating planetary health student initiatives such as disseminating the results of the PHRC, research publications, and learning from local sustainability initiatives. We also recommend that a nursing student join the “Eco Stewardship Committee” so that both students in nursing and natural and applied sciences can provide input into sustainable solutions.</li> </ul>	
Campus Sustainability	C
<ul style="list-style-type: none"> <li>While efforts are made within the SoN and the institution to pursue sustainability, specific areas of carbon neutrality, utilization of renewable energy, and sustainability guidelines present opportunities for further improvement.</li> <li><b>Recommendations:</b> We recommend that PHRC contributing members collaborate with TWEC in launching their “Upcycling TWU” campaign that promotes use of renewable energy and implements practical ways to decrease carbon emission on a campus wide level.</li> </ul>	

# 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 Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
  1. Describe how the environment and human health interact at different levels.
  2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
  3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- **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 [Literature Review by Metric](#) is available for the 2022 medicine report card metrics. We are in the process of updating this review and making it more applicable to all the disciplines. However the review serves as a rough collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

# Planetary Health Curriculum

***Section Overview:*** *This section evaluates the integration of relevant planetary health topics into the 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.*

<b>1.1. Does your nursing school offer courses regarding the relationships between extreme weather events, health effects, and climate change?</b>	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p>The course <a href="#">NURS 227</a> Planetary and Global Health is integrated into the undergraduate core curriculum and is mandatory for all students to take in their second year. The course explores, in particular, “past and current global health topics such as the global burden of disease, health systems strengthening, public and health policy, human rights, Indigenous health, infectious diseases and global disasters” (Astle &amp; Brandsma, 2024, p.1).</p> <p><b>NURS 227</b> - Planetary and Global Health - Week 2 - The relationship between extreme weather events, climate change and human health is thoroughly discussed throughout this lecture.</p> <p><b>NURS 317:</b> Community Health - Seminar 1 - Identifies climate and environment as a risk factor for poor health.</p>	

<b>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?</b>	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	

Score Assigned:	3
<p><i>Score explanation:</i></p> <p><b>NURS 127:</b> Health Promotion and Primary Health Care - Seminar 3 - Pre-reading TED talk speaks to the negative effects of environmental air pollutants.</p> <ul style="list-style-type: none"> <li>• Seminar 4 - Slide 5 &amp; 12: The lecture highlights that pollution and poor air quality contribute negatively to an individual's overall health.</li> <li>• Seminar 6 - Slide 20: It is noted that air quality and climate should be taken into account when doing a health assessment of a community.</li> </ul> <p><b>NURS 227:</b> Planetary and Global Health - Week 2 - The correlation between climate change, extreme weather events, and increasing cases of communicable and noncommunicable disease is explored. Air pollution caused by wildfires and the effect on respiratory health is particularly emphasized. An interactive climate change in-class activity was implemented in 2024.</p>	

1.3. Does your nursing curriculum address the impacts of climate change on the changing patterns of infectious diseases?	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p><b>NURS 227:</b> Planetary and Global Health - Week 2 - Slide 50: highlights changes in vector ecology as one of the primary impacts of climate change on human health</p> <p><b>NURS 317:</b> Community Health - Seminar 9 - Highlights the historical ways globalization has altered infectious disease transmission.</p>	

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 <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p><b>NURS 127:</b> Health Promotion and Primary Health Care- Seminar 3 - Pre-reading TED talk outlines the effects of environmental air pollutants on asthma exacerbations.</p>	



- Seminar 5 - Slide 6 highlights how pollution and inadequate access to food/water are risk factors for numerous pathologies.

**NURS 227:** Global and Planetary Health - See metric 1.2 for explanation.

**NURS 317:** Community Health - Discusses the pathophysiological health effects resulting from environmental degradation and climate change across a few seminars:

- Seminar 9 - Included activities and theory that discussed Grand Rapids, Michigan and increased incidence of lead poisoning because of environmental degradation.
- Seminar 10 - Prompted themes of Planetary Health as it relates to emerging pathogens and incidence of pathogens in resource poor nations.

### 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:

2

*Score explanation:*

**NURS 227:** Global and Planetary Health - Week 2 - Slide 27-28: demonstrates that ecological drivers such as climate change and biodiversity loss can impact human's mental health.

### 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:

3

*Score explanation: Insert explanation here.*

**NURS 127:** Health Promotion and Primary Health Care- Seminar 4 - Lecture highlights the relationships between food and water security and its impacts on health.

- Seminar 3 - Pre-reading TED talk (minute 4:57) talks about how food insecurity complicates health and health outcomes.

**NURS 227:** Planetary and Global Health - Week 2 - The impact of climate change on both food and water supply and quality is demonstrated throughout the lecture.

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

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

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

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

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

Score Assigned:

3

*Score explanation:*

**NURS 227:** Planetary and Global Health - Week 3 - Module C-1: discusses the co-benefits of plant-based diets on environmental and individual health.

**NURS 300:** Nursing Therapeutics II - Student led presentations highlighted the environmental benefits of eating a vegetarian and vegan diet.

**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:*

**NURS 227:** Planetary and Global Health - Week 2 - In both mandatory pre-readings (Module B-2) and lecture content, the impact of biodiversity loss and climate change on human health is explicitly taught.

**NURS 317:** Community Health - Highlights the relationship between ecosystem health, human health, and climate change through a few seminars and activities.

- Student presentations: student groups highlighted the human health and ecosystem health relationship in their experiential learning presentations for their specific community health settings and populations. One group spoke to their experience from an Indigenous health perspective.
- Seminar 10: acknowledged how the environment is a changeable factor to alter the transmission of communicable diseases.

**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 <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	3
<i>Score explanation:</i> <b>NURS 227:</b> Planetary and Global Health - Week 6 - demonstrates the critical health challenges that inequitably impact women. See metric 1.2 for the effect of air pollution on humans. <b>NURS 322:</b> Care of the Childbearing Family - Seminar 6 - Lecture notes that exposure to toxins in the environment during the prenatal period can have teratogenic effects on the fetus alongside individual adverse effects for the mother.	

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 <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	3
<i>Score explanation:</i> <b>NURS 127:</b> Health Promotion and Primary Health Care - Seminar 10 - This lecture thoroughly covers the Indigenous people's value of connection to the land and the impact this has on human health. <b>NURS 227:</b> Planetary and Global Health - Week 3: An Indigenous faculty member taught part of the class on Indigenous ways of knowing in Planetary Health such as land stewardship and entanglement. Pre-readings (Module C-2 and C-3) extensively highlight the importance of an Indigenous perspective for planetary health solutions. <b>NURS 317:</b> Community Health - the importance of Indigenous and Traditional Knowledge Systems as essential components for planetary health solutions were highlighted in a seminar and student presentations. <ul style="list-style-type: none"> <li>• Seminar 6 - Students were invited to visit an Indigenous community where a speaker shared their expertise in Indigenous ways of knowing and emphasized how such knowledge should be integrated.</li> <li>• Student Presentations - Students shared Traditional and Indigenous ways of knowing from their different community health settings and populations.</li> </ul>	

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 <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	

This topic was <b>not</b> covered. (0 points)	
Score Assigned:	3
<i>Score explanation:</i> <b>NURS 127:</b> Health Promotion and Primary Care - Seminar __? - Students complete a “windshield survey” of the TWU campus identifying potential threats to health. <b>NURS 318:</b> Community Health Clinical - Module 1 - Students in clinical placements at the TWU Wellness Center explore this topic in depth.	

<b>1.12. Does your nursing curriculum address socioeconomic/racial disparities in extreme weather and climate change exposure?</b>	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	3
<i>Score explanation:</i> <b>NURS 227:</b> Planetary and Global Health - Week 2 & 3, Module A-5: Week 2’s lecture highlights the inequitable effect of climate change on the health of those living in Sub-Saharan Africa (Slide 51). Environmental racism in Canada is discussed in Week 3. In Module A-5, the idea of decolonization within global health is explored. <b>NURS 322:</b> Students involved in planetary health research with Dr. Astle presented their research explaining the inequitable impact of climate change and extreme heat on persons with Albinism.	

<b>1.13. Does your nursing curriculum address inequitable health impacts of climate change globally?</b>	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	3
<i>Score explanation: Insert explanation here.</i> <b>NURS 127:</b> Health Promotion and Primary Health Care - Seminar 4 - The lecture addresses the CNA position statement on global health and equity, acknowledging the disparities that exist throughout the world. <b>NURS 227:</b> Planetary and Global Health - See metric 1.12 for evidence. <b>NURS 317:</b> Community Health - Seminar 6 - Approached the issue of shifting from a	

reactionary response to prevention as it relates to millions each year dying of communicable diseases. It was highlighted that those suffering most are primarily in 'resource-poor' countries and are disproportionately affected, as in line with the values of Planetary Health.

**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:

3

*Score explanation:*

**NURS 127:** Health Promotion and Primary Health Care - See evidence for 1.13

**NURS 227:** Planetary and Global Health - Week 2 & 3, Module B-3 - The inequitable impact of climate change on Indigenous peoples and persons with albinism is explained. Further evidence is in Metric 1.12.

**NURS 317:** Community Health - See metric 1.13 for evidence.

**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:

3

*Score explanation:*

See Evidence for 1.12, 1.13, and 1.14

**NURS 127:** Health Promotion and Primary Health Care - Slide 2: Brueggemann's prayer highlights the environmentalist's concern with increasing development and the harm of nature. It also highlights the increasing gap between the rich and the poor.

**NURS 227:** Planetary and Global Health - Week 2 & 3 - discussion of environmental degradation and the impact on human health

**1.16. Does your nursing curriculum address the outsized impacts of anthropogenic**

environmental toxins on marginalized populations and communities?	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i>            See Evidence for 1.12, 1.13, and 1.14  <b>NURS 127:</b> Health Promotion and Primary Health Care - Seminar 12 - Slide 26: mentions that racialized people are more likely to experience the negative effects of environmental pollution  <b>NURS 227:</b> Planetary and Global Health - Week 3 - This lecture explores the effects that anthropogenic environmental toxins within water systems disproportionately effect Indigenous communities in Canada.  <b>NURS 317:</b> Community Health - Seminar 9 - Discussion about lead poisoning's effect on citizens with low socioeconomic status.</p>	

1.17. Does your nursing curriculum address the impacts of extreme weather events on healthcare systems?	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i>  <b>NURS 227:</b> Planetary and Global Health - Week 5 &amp; 11: The impact of extreme weather events and complex humanitarian emergencies on healthcare systems is discussed thoroughly. The nurse's role amidst these situations is also discussed. This topic is covered extensively in NURS 227.</p>	

1.18. Does your nursing program address the carbon footprint of healthcare systems?	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	

Score Assigned:	3
<p><i>Score explanation: Insert explanation here.</i></p> <p><b>NURS 227:</b> Planetary and Global Health - Week 1 &amp; 3 - A <a href="#">video</a> is shown to demonstrate the amount of waste produced from the healthcare system. In Week 3 content, the healthcare system's carbon footprint in relation to waste produced was thoroughly discussed.</p> <p><b>NURS 317:</b> Community Health - A new mandatory skills practice lab was added where community health nursing skills were taught with the value of minimizing waste.</p>	

<b>1.19*. Does your nursing program curriculum or coursework highlight the waste generated by healthcare provision?</b>	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	3
<p><i>Score explanation: Insert explanation here.</i></p> <p><b>NURS 227:</b> See metric 1.18</p> <p><b>NURS 317:</b> See metric 1.18.</p>	

<b>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.)?</b>	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)	
This topic was covered in <b>elective</b> coursework. (1 point)	
This topic was <b>not</b> covered. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p><b>NURS 227:</b> Planetary and Global Health - Week 2 - Slide 27: demonstrates the impact of climate change on antimicrobial resistance.</p> <p><b>NURS 317:</b> Community Health - Seminar 10 speaks to levels of prevention for communicable diseases and antibiotic resistance where class discussion involved the overuse of antibiotics in developed nations.</p>	

<b>1.21. Does your nursing school's curriculum introduce strategies for having conversations</b>
--

**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:

2

*Score explanation:*

**NURS 227** - Planetary and Global Health - Week 3, Module C-1 - A mandatory module within the core curriculum encourages students to explore evidence-informed strategies for having conversations with family and friends about climate change.

**NURS 317:** Community Health - A new mandatory skills practice lab focused on virtual health care and health teaching where forms of communication to engage with clients were taught to students. The lab emphasized the Community Health Nurses of Canada standards of practice which included standards of evidence-informed practice and professional relationships. The topic of environmental disruptions and climate change was not the primary topic of discussion though strategies learned can be applied to conversations about planetary health

**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)

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

Score Assigned:

1

*Score explanation:*

Dr. Barbara Astle, professor and Director of the MSN program at the SoN, is responsible for planetary health research and education at both undergraduate and graduate levels in the SoN. Tamarah Brandsma, sessional assistant professor of nursing, is also involved in planetary health education in the undergraduate curriculum. Dr. Astle and Professor Brandsma teach the course, "Planetary and GlobalHealth," a mandatory course for all second-year undergraduate nursing students.

**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 year. (0 points)	
Score Assigned:	2
<i>Score explanation:</i> In 2024, the Faculties of Nursing and Natural and Applied Sciences co-hosted the Planetary Health Conference where speakers from different educational backgrounds offered insight into their personal experiences with climate change.	
<b>Section Total (64 out of 65)</b>	
<b>98%</b>	

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# Interdisciplinary Research

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

## 2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your institution?

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

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

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

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

Score Assigned:

3

### *Score explanation:*

[Dr. Barbara Astle](#), Professor and Associate Dean of the MSN program at the SoN, is extensively engaged in planetary health research at national and international levels. In particular, her work has helped pioneer planetary health educational frameworks that have been implemented within the SoN. She has also brought attention to climate justice for Persons with Albinism (PWA), which is research she is conducting with an interdisciplinary group of scholars, advocates, CSOs, etc.

Dr. Barbara Astle and co-investigators Laura Reifferscheid (PhD) and Lindsay Komar (RN, MSN) worked with the CASN Planetary Health Interest Group to disseminate a survey determining how planetary health is implemented in nursing education programs across Canada in March 2024. This work will be submitted for publication February 2025.

Faculty members Rick Sawatzky, Kendra Reiger and Kathleen Lounsbury as well as Monica Friesen a research fellow are conducting research entitled “Social Determinants and Quality of Life Measurement Framework for Indigenous Digital Health Systems”. Funding was provided through the [Indigenous Digital Health Ecosystem](#) (IDHE).

## 2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution?

There is <b>at least one</b> dedicated department or institute for interdisciplinary planetary health research. (3 points)	
There is <b>not currently</b> a department or institute for interdisciplinary planetary health research, but there are <b>plans</b> to open one in the next 3 years. (2 points)	
There is an <b>Occupational and Environmental Health department</b> , but no interdisciplinary department or institute for planetary health research. (1 points)	
There is <b>no</b> dedicated department or institute. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p><a href="#">The Center of Equity and Global Engagement</a> is co-directed by nursing faculty Dr. Barbara Astle and Dr. Sheryl Reimer-Kirkham, both of whom are involved in planetary health research. It is the center from which interdisciplinary planetary health research occurs.</p> <p>Currently in development, the university is in the process of establishing an institute for planetary health and sustainability (this will include three foci: research, education, and service).</p>	

<b>2.3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your institution?</b>	
Yes, there is a process in which community members impacted by climate and environmental injustice have <b>decision-making power</b> in the climate + environmental research agenda. (3 points)	
Yes, there is a process in which community members impacted by climate and environmental injustice <b>advise</b> the climate + environmental research agenda. (2 points)	
<b>No</b> , but there are <b>current efforts</b> to establish a process for community members to advise or make decisions on the research agenda. (1 points)	
There is <b>no</b> process, and <b>no</b> efforts to create such a process. (0 points)	
Score Assigned:	2
<p><i>Score explanation:</i></p> <p>In 2024, TWU environmental club (TWEC) initiated a “All Candidates Meeting” on campus to have federal candidates of Langley discuss climate change with voters. This allowed community members disproportionately affected by climate change to voice their concerns and propose solutions. Although this does not directly inform the research agenda, this recurring initiative provides a voice to community members. This was confirmed by 2024-2025 <a href="#">TWEC co-presidents</a>.</p> <p>In 2023, TWEC hosted a Faculty of Natural and Applied Sciences <a href="#">Symposium</a> where undergraduate students involved in research in pharmaceuticals, climate change, invasive species, and sustainability discussed their research topics. This event was open to the public and hosted a question-and-answer session in which community members were involved in discussions regarding undergraduate research agenda.</p>	

In 2024, TWU hosted a [Planetary Health Conference](#) where topics of climate change, invasive species, and health were discussed. This event was open to the public and question-and-answer periods were provided. People disproportionately affected by climate change could ask questions on the current research agenda.

A [recent publication](#) by Dr. Barbara Astle was informed by persons with albinism who are disproportionately affected by climate change due to the lack of melanin in their skin. Three of the co-researchers are PwA who are providing input into the research and subsequent publications. The paper explored the impacts this population faces due to climate change. This research was presented at the 2024 Planetary Health Conference.

TWU is currently part of a Research Group with other Universities in British Columbia in putting together objectives for moving forward in creating processes in which community members can make decisions about research agenda titled: “BC Climate and Health Research Priorities.” This was confirmed by [Dr. Barb Astle](#).

TWU SoN faculty are involved in a [Indigenous Digital Health Ecosystem project](#), where Indigenous knowledge keepers are engaged in a learning alliance in research on how to integrate information about social determinants of health and quality of life in a digital health system for Indigenous communities.

#### 2.4. Does your **institution** have a planetary health website that centralises ongoing and past research related to health and the environment?

There is an **easy-to-use, adequately comprehensive** website that **centralises** various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities. (3 points)

There is a website that **attempts to centralise** various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive. (2 points)

The **institution** has an **Office of Sustainability website** that includes **some** resources related to health and the environment. (1 point)

There is **no** website. (0 points)

Score Assigned:

2

*Score explanation:*

The [TWU Research](#) website attempts to centralize research at TWU but not planetary health research specifically. It is not regularly updated but does carry resources related to the environment and health.

#### 2.5. Has your **institution** recently hosted a conference or symposium on topics related to planetary health?

Yes, the **institution** has hosted at least one conference or symposium on topics related to planetary health in the past year. (4 points)

Yes, the <b>institution</b> has hosted at least one conference or symposium on topics related to sustainable healthcare/vetcare in the past year. (3 points)	
Yes, the <b>institution</b> has hosted a conference on topics related to planetary health / sustainable healthcare/vetcare in the past three years. (2 points)	
The <b>institution</b> has not hosted any conferences directly, but they have provided financial support for a local planetary health event. (1 point)	
No, the <b>institution</b> has not hosted a conference on topics related to planetary health in the past three years. (0 points)	
Score Assigned:	4
<p><i>Score explanation:</i></p> <p>In March 2024, the Faculty of Nursing and the Faculty of Natural and Applied Sciences co-hosted a Planetary Health Conference titled “<a href="#">Sustaining and Sustaining the Wellbeing of our Ecosystems</a>”. Students and faculty from different disciplines were able to present varying research related to Planetary Health.</p>	

<b>2.6. Is your <u>institution</u> a member of a national or international planetary health or ESH/ESV organisation?</b>	
Yes, the institution is a member of a national or international planetary health or ESH/ESV organisation. (1 points)	
No, the institution is <b>not</b> a member of such an organisation. (0 points)	
Score Assigned:	1
<p><i>Score explanation:</i></p> <p>Dr. Barbara Astle and other faculty members are individual members of the Alliance for Healthy Environments, Planetary Health Alliance, Global Consortium on Climate and Health Education, Canadian Association of Nurses for the Environment, and Nursing Climate Change.</p> <p>TWU is an institutional member of the <a href="#">Canadian Association for Global Health, Pacific-Northwest Health Equity Network</a> (PHEN) (focuses on the climate crisis and equity issues), and member of the Nursing Climate Challenge.</p>	

<b>Section Total (15 out of 17)</b>	<b>88%</b>
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*Are there additional research resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.*

# Community Outreach and Advocacy

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

<b>3.1. Does your <u>institution</u> partner with community organisations to promote planetary and health?</b>	
Yes, the <b>institution</b> meaningfully partners with <b>multiple</b> community organisations to promote planetary and environmental health. (3 points)	
Yes, the <b>institution</b> meaningfully partners with <b>one</b> community organisation to promote planetary and environmental health. (2 points)	
The <b>institution</b> does not partner with community organisations, but has participating in community focused events relating to planetary health. (1 point)	
No, there is <b>no</b> such meaningful community partnership. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p>Trinity Western Environmental Club has established multiple partnerships with the following organizations that promote planetary and environmental health.</p> <p><a href="#">Salmon River Enhancement Society</a> - TWU partners with this organization to offer the <a href="#">Salmon in the Valley School Program</a>: a day-camp educating local children on conservation.</p> <p><a href="#">Langley Environmental Partners Society</a> - TWU partners directly with this non-governmental organization to initiate and carry out different environmental health initiatives in the community. See metric 2.3 regarding all-candidates meeting.</p> <p><a href="#">Climate Crisis Langley Action Partners (CCLAP)</a> - TWU partnered with CCLAP for all candidates meeting. Both co-presidents of TWEC serve on this team.</p> <p><a href="#">ConVersing/ConServing Project</a> - Incorporates creative writing and poetry into TWEC's sustainability events.</p> <p><a href="#">A Rocha Canada</a> - This environmental conservation organization partners with TWU, providing volunteer opportunities and internships to students interested in conservation.</p> <p>Dr. Barb Astle is a board member for the <a href="#">Pacific-Northwest Health Equity Network</a> (PHEN) (focuses on the climate crisis and equity issues).</p> <p>The provincial group of the "<a href="#">Canadian Association of Nurses for the Environment</a>" (CANE) includes student representation from the SoN.</p>	

A member of the Planetary Health Report Card team presented a previous PHRC (2022-2023) at the 2024 National Conference hosted by the Canadian Nursing Students Association (CNSA). The CNSA is a national organization that facilitates national dialogue among nursing students in which the promotion of planetary health was achieved.

The SoN partners with local Indigenous communities to provide education to first and third year undergraduate students regarding Planetary Health, specifically related to the importance of the communities' relationship with the land

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

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

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

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

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

Score Assigned:

3

*Score explanation: Insert explanation here.*

See metric 2.5 for explanation. The [Planetary Health Conference](#) was open to community members.

The Trinity Western Environmental Club hosts "Sustainability Week" annually. Events are open to community members.

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

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

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

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

Score Assigned:

2

*Score explanation:*

Last year, the student newspaper, “[Mars Hill](#)”, put out several issues on sustainability at TWU and practical sustainable practices students can implement. The newspaper was available for all students.

The [TWU SoN Instagram](#) sometimes includes updates on Planetary Health.

The [TWEC instagram](#) regularly posts updates on sustainable practices and sustainability events.

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

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

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

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

Score Assigned:

2

*Score explanation:*

Fraser Health, the health authority in which TWU is situated, offers an online course available to all staff members called “[Orientation to Sustainable Health Systems](#)”. Learning outcomes include: explain the impacts of climate change on health and health systems, describe how health systems contribute to climate change, and identify opportunities to integrate sustainability into your work.

TWU School of Nursing Masters Program offers a course (NURS 607) where students can choose their topic of study; one option is planetary and global health. This course is taken with NURS 227 students, though MSN students have additional assignments.

TWU is currently working towards creating a program where one can receive their certificate in Planetary Health and Sustainability. The program may be taken by undergraduate or postgraduate students. Students from any discipline are able to apply for this certificate. The goal is to have this certificate approved in 2025.

**3.5. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about environmental health exposures?**

Yes, the **nursing school** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)

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

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



Score Assigned:	2
<p><i>Score explanation:</i>  The Planetary Health Conference at TWU covered topics of extreme weather and the impacts on human health. All posters and presentations are available on the conference's <a href="#">website</a> which is accessible to the public.</p> <p>Fraser Health offers extensive resources for patients about the climate, environment, and health. As most clinical experiences are within Fraser Health, students can use the following resources to teach patients while in clinical. This information is available to the public on Fraser Health's <a href="#">website</a>.</p>	

<b>3.6. Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about the health impacts of climate change?</b>	
Yes, the <b>medical school</b> or <b>all affiliated hospitals</b> have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	2
<p><i>Score explanation:</i>  See metric 3.5 for evidence.</p>	

<b>Section Total (14 out of 14)</b>	<b>100%</b>
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# Support for Student-Led Planetary Health Initiatives

**Section Overview:** This section evaluates institutional support for student-led planetary health initiatives, such as funding, fellowships, programming, and student groups. Planetary health is a young field and, as young people facing a future deeply shaped by climate change, students are often some of the first at an institution to engage with it. Institutions should provide support for students to engage in sustainability quality improvement (QI) initiatives, discover mentors in their area of interest, and receive funding for planetary health projects.

## 4.1. Does your institution offer support for students interested in enacting a sustainability initiative/QI project?

Yes, the **institution** *either* offers grants for students to enact sustainability initiatives/QI projects *or* sustainability QI projects are part of the core curriculum. (2 points)

The **institution** encourages sustainability QI projects (to fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, **but** there is no student funding available and there is no requirement to participate. (1 point)

No, **neither** the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects. (0 points)

Score Assigned:

2

*Score explanation:*

Within the N227: Planetary and Global Health course, each student is required to create and deliver a presentation regarding a planetary health topic as part of the course's core requirements. With N227 being a course required by all undergraduate nursing students, each student will make at least one presentation related to planetary health during their undergraduate education.

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

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

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

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

Score Assigned:

1

*Score explanation: Insert explanation here.*

In March 2024, the Faculty of Nursing and the Faculty of Natural and Applied Sciences co-hosted a Planetary Health Conference titled “[Sustaining and Sustaining the Wellbeing of our Ecosystems](#)”. Students from different disciplines were able to present varying research related to Planetary

Health. Student-led planetary health research was funded by Trinity Western University's [Undergraduate Student Research Awards](#).

Drs. Barbara Astle and Sheryl Reimer-Kirkham have hired undergraduate student interns to assist them with analyzing some of their albinism research which has aspects of planetary health. While no explicit module or program exists for conducting planetary health research opportunities do exist within the SoN of nursing to conduct planetary health related research.

Moreover, students may apply to the [Undergraduate Student Research Awards](#) to receive funding to conduct undergraduate research on a topic of interest under the supervision of faculty.

In January 2025, a planetary health position statement was adopted by the Canadian Nursing Students' Association (CNSA) titled "advancement of planetary health in nursing: achieving praxis in curriculum and practice." The effort was a pan-Canadian effort organized by different undergraduate nursing students with one TWU nursing student contributing to the research. Dr. Barb Astle was one of the reviewers of this paper. The School of Nursing sponsors undergraduate nursing students to attend the CNSA national conference which is an opportunity that allows students to participate in research and advocacy related to planetary health.

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

The institution has a webpage with specific information related to planetary health or sustainable healthcare/vetcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. (2 points)

There is an institution webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information. (1 point)

There is **no institution** specific webpage for locating planetary health and/or sustainable healthcare projects or mentors. (0 points)

Score Assigned:

1

*Score explanation:*

See metric 3.3 for TWEC and TWU Nursing instagram.

[TWU news](#) posts regular updates about sustainability initiatives around the university. Updates are not specific to Planetary Health information alone, but include it when related events occur.

A professor in the Faculty of Natural and Applied Sciences hosts a column called the "[Green Beat](#)" in a local online newspaper called the "[Langley Advance Times](#)" He posts regularly about his research on sustainability and invasive species.

**4.4. Does your institution have registered student groups dedicated towards fostering a**

<b>culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?</b>	
Yes, there is a student organisation <b>with faculty support</b> at my medical school dedicated to planetary health or sustainability in healthcare. (2 points)	
Yes, there is a student organisation at my medical school dedicated to planetary health or sustainability in healthcare but it <b>lacks faculty support</b> . (1 point)	
No, there is <b>not</b> a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points)	
Score Assigned:	2
<p><i>Score explanation:</i></p> <p>The TWU Planetary Health Report Card Student Group comprises eight students with representation across all four years of the undergraduate nursing program. With support and leadership from Dr. Barbara Astle, this student group completes the PHRC and fosters a culture of planetary health engagement among their peers.</p> <p>TWEC is a student-led environmental group that nursing supports in their sustainability initiatives.</p>	

<b>4.5. Is there a student liaison representing sustainability interests who serves on a <u>department or institutional</u> decision-making council to advocate for curriculum reform and/or sustainability best practices?</b>	
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
<p><i>Score explanation:</i></p> <p>The “Eco Stewardship Committee” is made up of two students outside of the school of nursing that meet with institution faculty to discuss sustainability initiatives. No nursing students are on this committee at this time but can seek out these initiatives if they so desire.</p>	

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

Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.	1
Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	1
Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	1
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1
<p><i>Score explanation:</i> See metric 2.5 and 3.2 for explanation regarding the Planetary Health Conference and Sustainability week.</p> <p>There are steps being taken towards creating a community garden on the TWU campus, however, approval has not yet been received. There are student research opportunities on projects that focus on sustainable agriculture. One example of this is a project focused on reducing pesticides; this research has been presented at several conferences such as the CREATE Conference and Murdock Conference.</p> <p>See metric 3.3 for All Candidates meeting.</p> <p>As part of March 2024's Planetary Health Conference titled "<a href="#">Sustaining and Sustaining the Wellbeing of our Ecosystems</a>," an art installation by Helma Sawatzky, PhD titled "The Poetree Project" consisting of 75-100 recycled cedar fence slats suspended from tree branches. It invites participants to create short poems that reflect on our deep implication in—and participation with—the natural world.</p> <p>See metric 3.1 for explanation regarding A Rocha Canada and volunteer opportunities.</p> <p>TWU Fitness and Recreation runs an <a href="#">outdoor club</a> which organizes activities like hiking, skiing, snowshoeing, and rafting. Last year, TWU Fitness and Recreation also offered a <a href="#">10 day canoeing trip</a> where students could receive credit for a core requirement by attending the trip (HKIN 206).</p>	

<b>Section Total (13 out of 15)</b>	<b>87%</b>
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# Campus Sustainability

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

5.1. Does your <u>institution</u> have an Office of Sustainability?	
Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is <b>at least one designated staff member</b> 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 <b>no specific staff member</b> in charge of hospital sustainability. (2 points)	
There are <b>no salaried sustainability staff</b> , but there is a sustainability task force or committee. (1 point)	
There are <b>no</b> staff members <b>or</b> task force responsible for overseeing campus sustainability. (0 points)	
Score Assigned:	2
<p><i>Score explanation:</i></p> <p>TWU hires a ‘Grounds Manager’ who monitors ecological and pollution indicators throughout the institution’s property. There is no formal sustainability office. However, the Campus Facilities department salaries a “Sustainable Facility Professional,” who leads various sustainability initiatives.</p> <p>Moreover, as of November 2023, TWU has developed a “Sustainability Initiative.” Every faculty Department was asked to respond to how they were integrating the Sustainable Development Goals into their sustainability with students and faculty. From this input, a certificate for sustainability is currently being developed which includes all disciplines.</p>	

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

Score Assigned:	0
<p><i>Score explanation:</i></p> <p>TWU stated in their <a href="#">strategic research plan</a> that efforts would be made to continue research in planetary health and “carbon offsets”. Further, the <a href="#">Robert G. Kuhn building</a> was built to reinforce TWU’s vision of sustainability and energy efficiency. Unfortunately, no evidence could be found of the institution’s plans to reduce its carbon footprint by a certain date.</p>	

5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?	
Yes institution buildings are <b>100%</b> powered by renewable energy. (3 points)	
Institution buildings source <b>&gt;80%</b> of energy needs from off-site and/or on-site renewable energy. (2 points)	
Institution buildings source <b>&gt;20%</b> of energy needs from off-site and/or on-site renewable energy. (1 point)	
Institution buildings source <b>&lt;20%</b> of energy needs from off-site and/or on-site renewable energy. (0 points)	
Score Assigned:	0
<p><i>Score explanation:</i></p> <p>The Robert G. Kuhn Building (RGK) architectural design uses daylight to create a thermal chimney to reduce energy usage. In the RGK building, classrooms and major spaces are served through a hybrid heat pump system. The Facilities department is piloting battery-powered groundskeeping tools to replace the gas-powered ones, reducing greenhouse gas emissions and noise pollution.</p> <p>As a part of their “<a href="#">Upcycling TWU</a>” campaign, TWEC is working on implementing solar panels on the roof of an outdoor pavilion. This will provide power for the personal charging stations inside this pavilion.</p>	

5.4. Are sustainable building practices utilised for new and old buildings on the <u>institution’s</u> campus, with design and construction of new buildings and remodelling of old buildings conforming to a published sustainability rating system or building code/guideline?	
Yes, sustainable building practices are utilised for new buildings on the institution's campus and the <b>majority</b> of old buildings <b>have been retrofitted</b> to be more sustainable. (3 points)	
Sustainable building practices are utilised for new buildings on the institution’s campus, but most old buildings have <b>not been retrofitted</b> . (2 points)	
Sustainable building practices are <b>inadequately or incompletely</b> implemented for new buildings. (1 point)	

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

Score Assigned:

2

*Score explanation:*

In the creation of the [Robert G. Kuhn building](#) on the School of Nursing campus, passive sustainability strategies such as daylighting, a highly efficient envelope, and a thermal chimney created by the atrium are all part of the design, while the use of locally-sourced timber reduces the project's carbon footprint. Active strategies include a mechanical system based on zoned roof-top units supported by heat pumps, and the heat recovery system offered by the interconnected atrium. Custom-designed solar shades are carefully placed to reduce both glare and heat gain. The building was designed to achieve 15.9% energy reduction as compared to ASHRAE 90.1-16. An advanced energy monitoring system separately monitors general load, mechanical load, and lighting load, identifying areas for improvement in building efficiency. Overall, mechanical and electrical systems were designed to code, with key decisions to exceed energy efficiency standards in some areas.

**5.5. Has the institution implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?**

Yes, the institution has implemented strategies to encourage and provide **environmentally-friendly transportation options** such as safe active transport, public transport, or carpooling and these options are well-utilised by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default. (2 points)

The institution has implemented **some** strategies to provide environmentally-friendly transportation options, but the options are **unsatisfactorily** accessible or advertised. (1 point)

The institution has **not** implemented strategies to encourage and provide environmentally-friendly transportation options. (0 points)

Score Assigned:

2

*Score explanation:*

The nursing program encourages students to carpool for clinical placements and attempts to group students who live in close proximity to each other to common clinical placements that are within reasonable distance of their residences. There are various statements in syllabi and in orientations for students to carpool to clinical placements.

TWU has a bus stop on campus to make environmentally friendly transportation more accessible to students. Recently, seven electric car charging stations were built on TWU premises to promote electric car usage.

Part of TWEC's "[Upcycling TWU](#)" campaign involves purchasing bikes that will be available for free student use.

**5.6. Does your institution have an organics recycling program (compost) and a conventional**



recycling program (aluminium/paper/plastic/glass)?	
Yes, the institution has <b>both</b> compost <b>and</b> recycling programs accessible to students and faculty. (2 points)	
The institution has <b>either</b> recycling <b>or</b> compost programs accessible to students and faculty, but not both. (1 point)	
There is <b>no</b> compost or recycling program at the medical school. (0 points)	
Score Assigned:	2
<i>Score explanation:</i> There are a variety of recycling and compost bins that are located throughout campus buildings that are easily accessible to both students and faculty.	

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 <b>adequate</b> sustainability requirements for food and beverages, including meat-free days or no red-meat, and <b>is engaged</b> in efforts to increase food and beverage sustainability. (3 points)	
There are sustainability guidelines for food and beverages, but they are <b>insufficient or optional</b> . The institution <b>is engaged</b> in efforts to increase food and beverage sustainability. (2 points)	
There are sustainability guidelines for food and beverages, but they are <b>insufficient or optional</b> . The institution is <b>not</b> engaged in efforts to increase food and beverage sustainability. (1 point)	
There are <b>no</b> sustainability guidelines for food and beverages. (0 points)	
Score Assigned:	3
<i>Score explanation:</i> TWU is contracted to Sodex who has a ' <a href="#">Better Tomorrow Plan</a> '. This plan includes a goal of a 34% reduction in carbon emissions, a 50% food waste reduction in order to reduce greenhouse gas emissions, and a goal of 33% plant based entrees. Sodexo is also a part of <a href="#">RE100</a> , which means they are set to have 100% renewable energy on their sites by 2025. Sodexo and TWU are committed to recycling cardboard, glass, steel, aluminum, paper, plastic, and e-waste, and also work to compost the food waste that is produced in their facilities. Sodexo and TWU are committed to supplying food that is locally raised and grown, as well cutting down one time use packaging by implementing reusable cutlery and dishware.	

5.8. Does the <u>institution</u> apply sustainability criteria when making decisions about supply procurement?
Yes, the institution has <b>adequate</b> sustainability requirements for supply procurement <b>and is engaged</b> in efforts to increase sustainability of procurement. (3 points)

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

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

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

Score Assigned:

2

*Score explanation:*

There is an informal sustainable supply procurement process in the program. Recently, in an effort to reduce planetary waste, the SoN has switched to use biodegradable gloves in nursing labs. Nursing lab Coordinators have no budgetary guidelines to purchase from sustainable suppliers and a budget increase would be needed to incentivize further sustainable procurement.

Currently, faculty are working on nature based initiatives for the nursing lab which will be implemented in September 2025 for all years of the nursing program.

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

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

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

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

Score Assigned:

1

*Score explanation:*

When TWEC runs events, they try to encourage sustainable practices such as bringing one's own cup/mug but no evidence of institutional guidelines is currently available.

At the Planetary Health Conference in 2024, a plant based menu was served alongside biodegradable cutlery. All programs were digital to reduce paper waste. Participants were encouraged to bring their own coffee mug.

**5.10. Does your institution have programs and initiatives to assist with making lab spaces more environmentally sustainable?**

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

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

There are <b>no</b> efforts at the institution to make lab spaces more sustainable. (0 points)	
Score Assigned:	2
<p><i>Score explanation:</i></p> <p>The program holds to the practice of re-use of supplies as much as possible. There is an emphasis on reusing supplies during certain clinical practice demonstrations. Used supplies and stock are accessible in the main lab during open lab practicing times. New supplies are normally used during a new skill or during a clinical assessment. Additionally, all second year undergraduate students receive a set of commonly used supplies for each individual's independent practice; students are expected to bring their kits to the scheduled lab times.</p> <p>See metric 5.8 for nature based initiatives for the nursing lab.</p>	

5.11. Does your <u>institution's</u> endowment portfolio investments include fossil-fuel companies?	
The institution is <b>entirely divested</b> from fossil fuels <b>and</b> has made a <b>commitment to reinvest divested funds</b> into renewable energy companies or renewable energy campus initiatives. (4 points)	
The institution is <b>entirely divested</b> from fossil fuels. (3 points)	
The institution has <b>partially divested</b> from fossil fuel companies <b>or</b> has made a <b>commitment to fully divest</b> , but <b>currently</b> still has fossil fuel investments. (2 points)	
The institution has <b>not divested</b> from fossil-fuel companies, but faculty and/or students are <b>conducting organised advocacy</b> for divestment. (1 point)	
Yes, the institution has investments with fossil-fuel companies and there have been <b>no efforts</b> to change that. (0 points)	
Score Assigned:	0
<p><i>Score explanation:</i></p> <p>No evidence could be identified that TWU has pledged to become fossil-free. Additionally, no evidence of student-led organized advocacy was found for divestment.</p>	

Section Total (16 out of 32)	50%
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Back to Summary Page [here](#)

# Grading

## Section Overview

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

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

## Planetary Health Grades for the Trinity Western University School of Nursing

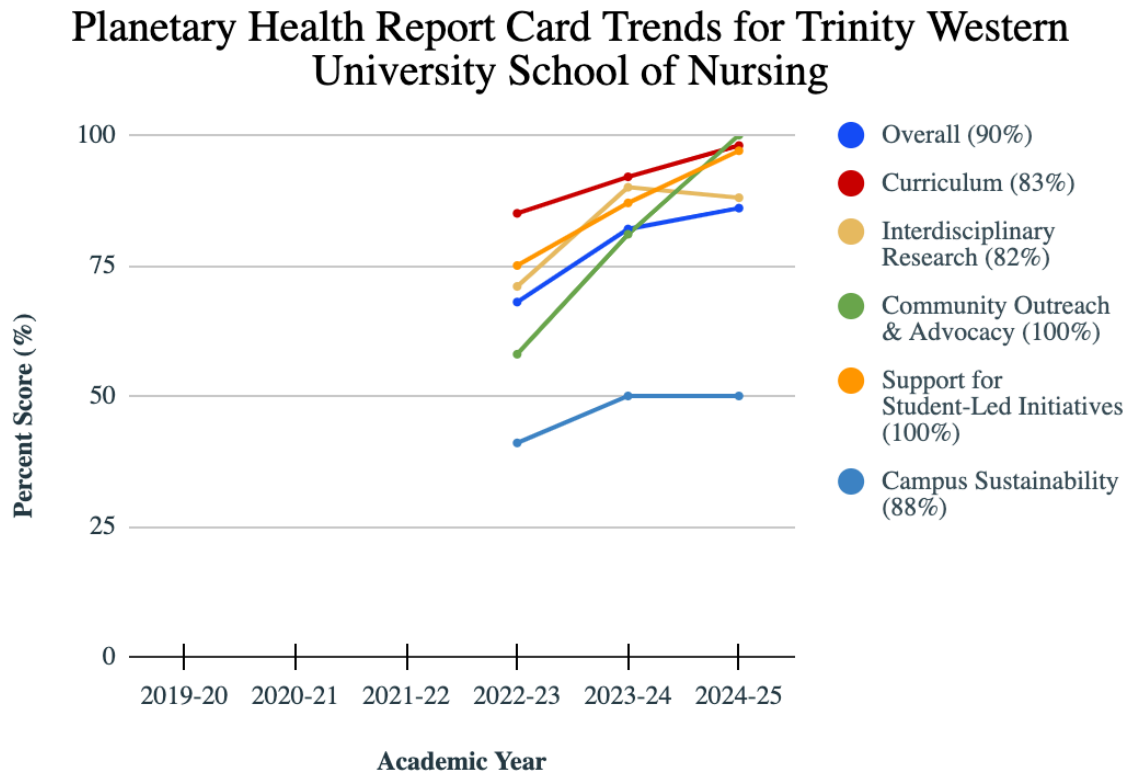
The following table presents the individual section grades and overall institutional grade for the Trinity Western University School of Nursing on this nursing-school-specific Planetary Health Report Card.

Section	Raw Score %	Letter Grade
<b>Planetary Health Curriculum (30%)</b>	$(64/65) \times 100 = 98\%$	A+
<b>Interdisciplinary Research (17.5%)</b>	$(15/17) \times 100 = 88\%$	A
<b>Community Outreach and Advocacy (17.5%)</b>	$(14/14) \times 100 = 100\%$	A+
<b>Support for Student-led Planetary Health Initiatives (17.5%)</b>	$(13/15) \times 100 = 87\%$	A
<b>Campus Sustainability (17.5%)</b>	$(16/32) \times 100 = 50\%$	C
<b>Institutional Grade</b>	$(98 \times 0.3 + 88 \times 0.175 + 100 \times 0.175 + 87 \times 0.175 + 50 \times 0.175) = 85\%$	A

# Report Card Trends

## Section Overview

This graph demonstrates trends in overall and section grades for the years in which Trinity Western University has participated in the Planetary Health Report Card initiative.



## References

Astle, B., & Brandsma, T. (2024). NURS 227: *Planetary and global health* [Syllabus]. School of Nursing, Trinity Western University.