



NURSING

Planetary Health Report Card (Nursing) 2026:

Trinity Western University



2025-2026 Contributing Team:

- Students: Nolan Lagrisola, Anaya Jhutti, Amberly Adema, Sachreet Dhillon, Carmella Bongon, Hannah Tso
- Faculty Mentors: Dr. Barbara Astle

Primary Contact: Nolan Lagrisola, celedonio.lagrisolai@mytwu.ca

Trinity Western University's Langley campus is located on the traditional, ancestral, unceded territory of the Stó:lō people.

Summary of Findings

Overall Grade	A
Curriculum	A+
<p>Trinity Western University School of Nursing (TWU SON) has a broad integration of planetary health education across all years in the undergraduate nursing program and in many graduate nursing programs. The University recently approved Canada’s first Planetary Health and Sustainability certificate. This is available to all undergraduate students in which nursing students can attain the undergraduate degree. Metrics 1.5 and 1.24 provide insight into the program’s gaps.</p> <p>Recommendations</p> <ul style="list-style-type: none"> • Metric 1.5 suggests the nursing program to describe in depth the mental health issues and well-being effects resulting from environmental degradation and climate change. • Metric 1.24 suggests the nursing program to uphold its current efforts in teaching about civic engagement and advocacy for environmental and structural determinants of health. The metric example provides insight into how a structured inter-disciplinary education for nursing students and non-nursings students 	
Interdisciplinary Research	A-
<p>The SON has significant contributions to planetary health research and scholarship backed by faculty expertise and a dedicated research centre for planetary and global health research. Metrics 2.3 and 2.4 highlight some institutional gaps.</p> <p>Recommendations</p> <ul style="list-style-type: none"> • Metric 2.2 re-affirms the plan to open a dedicated research centre for sustainability and planetary health as outlined in the Office of Research Strategic Plan. • Metric 2.3 suggests the institution implement a process in which community members impacted by climate injustice have decision-making power in the climate and environmental research agenda for the institution. • Metric 2.4 suggests the institution to launch a comprehensive website that centralizes campus resources related to health and the environment to share information about upcoming events, leaders in planetary health, and relevant funding opportunities. 	
Community Outreach and Advocacy	A+
<p>Groups at the institution and within the nursing program engage with the community about planetary health. Institutional and student-led groups such as the TWU Environmental Club spearheads community-facing engagement. The nursing program hosted a recent planetary health conference that involved community engagement. Metric 3.3 provides some clarity on a small program and institutional gap.</p> <p>Recommendations</p> <ul style="list-style-type: none"> • Metric 3.3 recommends the institution or the nursing program to have a centralized information system specifically for issues related to planetary health or sustainable healthcare distributed to all students. • Continue leveraging Fraser Health resources for planetary health (Metrics 3.4, 3.5, 3.6) 	
Support for Student-Led Initiatives	A
<p>The institution has several strengths within academic and non-academic departments that facilitate student-led initiatives for planetary health. A recently opened TWU Outdoor Centre provides students an opportunity to connect with nature and recent art exhibitions at the School of Arts, Media, and Culture showcased environment-related</p>	

pieces. There are several committees within the program and institution with student representation for planetary health concerns.

Recommendations

- Metric 4.2 suggests the nursing program and institution to launch specific research programs or fellowships for students interested in planetary health research.
- Metric 4.3 suggests the institution to complete the recommendation outlined in metric 3.3 through a centralized webpage for planetary health projects.

Campus Sustainability

C

The nursing program has several strengths related to campus sustainability through sustainable procurement practices. Using the same sustainability framework used by a university contractor, the institution can work to improve metrics 5.1, 5.2, 5.3, and 5.4.

Recommendations

- Metric 5.1 suggests the institution to have a dedicated office of sustainability with a designated staff member for sustainability on campus.
- Metric 5.2 suggests the institution create a plan to reduce its own carbon footprint by outlining a specified timeline for carbon neutrality.
- Metric 5.3 suggests the institution to continue work on revitalizing heating systems on campus towards electricity sources and construct on-site renewable energy infrastructure.
- Metric 5.4 suggests the university to continue efforts in retrofitting campus buildings to be sustainable.

Statement of Purpose

Planetary health is human health.

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

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

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

Definitions & Other Considerations

Definitions:

- **Planetary Health:** is described by the Planetary Health Alliance as “the health of human civilisation and the state of the natural systems on which it depends.” For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional ‘environmental health’ examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of health professional education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term “planetary health” to satisfy the metric.
- **Sustainable Healthcare:** As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.
- **Education for Sustainable Healthcare (ESH):** is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
 1. Describe how the environment and human health interact at different levels.
 2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
 3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- **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 (Curriculum Section):** this is a series of questions students are taught to ask during medical encounters that elicits patients' exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mould after flooding. Key components include place of residence over the life course, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution. Please be as specific as possible when providing evidence for this metric.
- **Elective:** The word "elective" refers to an optional course or lecture series that a student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- **Core Curriculum:** This refers to taught material that is delivered to the entire cohort of students in one year.
- **Clerkship / Outreach:** This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.
- **Clinical rotation:** This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).
- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.
- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.
- **Climate justice:** The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.
- **Extractivism:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to the

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

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

Scoring Matrix

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

Other considerations:

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

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

Planetary Health Curriculum

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

Curriculum: General

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 extreme 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:	3
<p><i>Score explanation:</i></p> <p>The course NURS 227 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 & Brandsma, 2024, p.1).</p> <p>The Planetary Health and Sustainability certificate is an undergraduate certificate offered to all students at Trinity Western University. The certificate requirements are fulfilled through courses that are taught in different disciplines which encourage inter-disciplinary education. The certificate signifies completion of several courses that include discussion about extreme weather events, health effects, and climate change. The School of Nursing offers courses specific to health effects whereas other academic programs offer the other prerequisite courses for students.</p> <p>NURS 227: 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>NURS 317: Community Health - Seminar 1 - Identifies climate and environment as a risk factor for poor health.</p>	

NURS 434: Leadership in Nursing - See Metric 1.2 which involved a student-led seminar about contemporary nursing leadership issues such as environmentally sustainable practices and planetary health.

1.2. Does your nursing program provide education regarding the impacts of extreme weather events (e.g. storms, 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:

3

Score explanation:

NURS 227: 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. In addition to the core course curriculum, the course is designed to involve other disciplines to present planetary health knowledge from their academic discipline. A professor of biology from the Faculty of Natural and Applied Sciences presented on climate change and Biodiversity in the Anthropocene.

NURS 424: Professional Ethics - Class 4 - Fraser Health's Integrated Homelessness Action Response Team was invited to speak to a class. Their presentation included how recent floods in British Columbia's Lower Mainland complicated their care with unhoused individuals along with how infrastructure damage complicated access to healthcare.

NURS 434: Leadership in Nursing - Class 7 - A student presentation shared the impacts of extreme weather events on individual health. An example was the 2021 and 2025 floods in British Columbia's Lower Mainland.

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:

3

Score explanation:

The following upper-undergraduate courses are part of the program's core requirements and discuss the following topics.

NURS 227: 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.

NURS 317: Community Health - Seminar 9 - Highlights the historical ways globalization has altered infectious disease transmission.

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:

3

Score explanation:

NURS 227: Global and Planetary Health - See metric 1.2 for explanation in which the correlation between extreme weather events and pathophysiological health effects is explored.

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:

While there is a dedicated psychiatric mental health nursing course, psychiatric illnesses that arise from environmental degradation and climate change were not discussed in this specific course. Topics of mental health and climate change are explored as topics in other courses:

NURS 137: See metric 1.10 which explores, from an Indigenous way of knowing, the connection between Indigenous communities and their lands as a social determinant of health.

NURS 227: Global and Planetary Health - Week 2 - Slide 27-28 & Module B-4: demonstrates that ecological drivers such as climate change and biodiversity loss can impact mental health in humans, including inducing climate anxiety and ecological grief. Also discussed the impact of nature and greenspaces on improving psychological well-being.

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:

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
<p><i>Score explanation:</i></p> <p>NURS 137: Indigenous Health - Addresses the relationships between land, environment, and health through Indigenous world views.</p> <ul style="list-style-type: none"> • Seminar 2: Introduces the definition of health promotion, models, and approaches that frame health as holistic and relational • <p>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.</p> <p>NURS 317: Community Health - Highlights the relationship between ecosystem health, human health, and climate change through a few seminars and activities.</p> <ul style="list-style-type: none"> • 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, microplastics)?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p>NURS 227: 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.</p> <p>NURS 322: 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.</p>	

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:	3
<p><i>Score explanation:</i></p> <p>NURS 137: Indigenous Health - Seminar 1 - Highlights Indigenous and Traditional Knowledge Systems through Indigenous ways of knowing and the Four R's, showcasing Indigenous knowledge as foundational to health and nursing practice. Examines Indigenous health promotion emphasizing Indigenous perspectives on health, lands, and wellbeing.</p> <p>NURS 227: Planetary and Global Health - Week 3: An Indigenous scholar and educator (Kathleen Lounsbury, MSN, RN) contributed to course content on Planetary Health and Stewardship, centering indigenous ways of knowing across Planetary Health Domains of interconnection within nature, equity, social justice and systems thinking. Pre-readings (Module C-2 and C-3) extensively highlight the importance of an Indigenous perspective for planetary health solutions.</p> <p>NURS 317: 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.</p> <ul style="list-style-type: none"> • 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. • Student Presentations - Students shared Traditional and Indigenous ways of knowing from their different community health settings and populations. 	

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:	3
<p><i>Score explanation:</i></p> <p>NURS 227: Planetary and Global Health – Week 2: Guest Speaker Dr. Clements (Biology) discusses electrofishing on TWU's campus in McMillan Lake.</p> <p>NURS 318: Community Health Clinical - Module 1 - Students in clinical placements at the TWU Wellness Center explore this topic in depth.</p>	

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:

3

Score explanation:

NURS 137: Indigenous Health - briefly addresses socioeconomic and racial disparities through examination of colonization, systemic racism, and structural inequities.

- Seminar 3: Examines policies and practices from colonization, including Indian Hospitals and content from the In Plain Sight Report
- Seminar 6: Focuses on cultural safety, cultural humility, and anti racism as applied to nursing practice

NURS 227: 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.

NURS 322: 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.

1.13. Does your nursing curriculum address the 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

Score explanation:

NURS 227: Planetary and Global Health. Week 7 "Reproductive and Women's Health" and Week 8 "Health of Young Children" examine disproportionate burdens of maternal and child morbidity and mortality in low- and middle-income countries, highlighting how poverty, nutrition, unsafe water and sanitation, infectious disease exposure, and limited access to healthcare contribute to preventable health inequities globally.

NURS 317: 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 137: Indigenous Health - Addresses health challenges impacting marginalized Indigenous populations through lived experiences and ways of living

- Seminar 8: Explores social determinants of health and their impact on Indigenous Health
- Seminar 9: Examines Indigenous peoples in urban settings and the unique structural and environmental challenges they face

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

NURS 317: Community Health - As mentioned in metric 1.13, environmental health challenges experienced by marginalized populations and communities is explored from an inequity lens.

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:

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

NURS 317: Community Health - As mentioned in metric 1.13, environmental health challenges experienced by marginalized populations and communities is explored from an inequity lens.

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:

3

Score explanation:

NURS 227: Planetary and Global Health - Week 3 - This lecture explores the effects that anthropogenic environmental toxins within water systems disproportionately affect Indigenous communities in Canada.

NURS 317: Community Health - Seminar 9 - Discussion about lead poisoning's effect on citizens with low socioeconomic status.

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

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

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

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

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

Score Assigned:

3

Score explanation:

NURS 227: Planetary and Global Health - Week 5 & 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.

NURS 434: Leadership in Nursing - Class 7: An exploration of contemporary nursing leadership issues involved a student-led seminar that spoke to how extreme weather events impact the Canadian healthcare system.

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:	3
<p><i>Score explanation:</i></p> <p>NURS 227: Planetary and Global Health - Week 1 & 3 - A video 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>NURS 317: Community Health - A new mandatory skills practice lab was added where community health nursing skills were taught with the value of minimizing waste.</p> <p>NURS 434: Leadership in Nursing - Class 7. A student presentation highlighted the greenhouse gas emissions generated by hospitals in Canada. The presentation also shared how waste-reduction was a key focus in literature and among health agencies.</p>	

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:	3
<p><i>Score explanation:</i></p> <p>NURS 227: As mentioned in metric 1.18, a video was shown to the class to demonstrate healthcare system waste production.</p> <p>NURS 317: As mentioned in metric 1.18, students were required to learn about minimising waste when in the community setting.</p> <p>NURS 434: As mentioned in metric 1.18, a student-led seminar for contemporary nursing leadership issues involved the discussion of healthcare system waste production.</p>	

1.20*. Does your nursing program cover the contributions of pharmaceuticals to environmental degradation and climate change (e.g., anaesthetic 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:	3
<p><i>Score explanation:</i></p> <p>NURS 227: Planetary and Global Health - Week 2 - Slide 27: demonstrates the impact of climate change on antimicrobial resistance.</p> <p>NURS 317: Community Health - Seminar 10 speaks to levels of prevention for communicable diseases and antibiotic resistance where class material involved the overuse of antibiotics in developed nations.</p>	

<p>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?</p>	
<p>Yes, the core curriculum includes strategies for conversing with patients and other health professionals regarding climate change and environmental disruptions. (2 points)</p>	
<p>There are elective courses that include strategies for conversing with patients and other health professionals regarding climate change and environmental disruptions. (1 point)</p>	
<p>This topic was not covered. (0 points)</p>	
Score Assigned:	2
<p><i>Score explanation:</i></p> <p>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.</p> <p>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</p> <p>NURS 434: Leadership in Nursing - Class 6. The content shared in class discussed strategies to form relationships to sustain and lead change in a health system. The skills taught in this class, while not explicitly related to the health effects of climate change, can be utilized to start conversations with other stakeholders about climate-related health impacts.</p>	

<p>1.22. Does your school have an appointed faculty or staff responsible for planetary health and environmental nursing?</p>	
<p>Yes, the nursing program has at least one appointed faculty or staff responsible for planetary health and environmental nursing. (1 point)</p>	
<p>This topic was not covered. (0 points)</p>	
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 years. (0 points)

Score Assigned:

2

Score explanation:

Planetary Health and Sustainability Certificate - See metric 1.1 which describes an interdisciplinary education experience regarding health risks and environmental disruptions.

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.

NURS 227: Planetary and Global Health Week11 - “Complex Humanitarian Emergencies” featured guest speakers for a lecture with expertise in Migration & Resettlement Program Coordination (Jennifer Mpoungu)and Church & Community Engagement (Heidebrecht Thiessen). Week 13 - “Role of Nursing and Interdisciplinary Practice in Christian Missions and Nongovernmental Organizations (NGOs)” featured guest speaker Meghann Buyco, MSN, RN – Albinism and Human Rights Research. This week explores the role of nursing and other disciplines in Christian missions and humanitarian NGOs, with a focus on ethical engagement, advocacy and global health equity.

1.24. Does your health professional curriculum include teaching on civic engagement/advocacy to address the environmental and structural determinants of health?

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

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

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

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

Score Assigned:

2

Score explanation:

Course materials in the program cover civic engagement to address environmental and structural determinants of health; however, a structured, inter-disciplinary format where nursing students and non-nursing students learn from each other in simulations or joint assessments related to environmental health is missing. Some elements in course material do, however, provide students an ability to participate in civic engagement with fellow nursing students only while emphasizing the inter-disciplinary nature of planetary health.

NURS 227: Planetary and Global Health - The course curriculum involves mandatory modules for students to learn about evidence-informed communication strategies to engage with others about planetary health and climate change. Moreover, leaders from other disciplines are invited to the course to participate in structured learning activities where students can ask questions about advocacy to address environmental and structural determinants of health. These lectures provide students the knowledge to complete assignments that solidify elements of civic engagement and advocacy for environmental and structural determinants of health. While learning with students outside of nursing is not part of the core curriculum, students learn and implement knowledge to complete assignments related to the metric above. See metric 1.21 as strategies can be translated into civic engagement instances.

NURS 317: Community Health - The course curriculum recognizes that nursing advocacy for the structural determinants of health is a political process and requires civic engagement as outlined in the British Columbia College of Nurses and Midwives standards and competencies.

NURS 434: Leadership in Nursing. The course focused on relevant leadership theories and roles for nursing. Various course themes recognized the structural determinants of health as a preamble to contemporary nursing leadership concerns for the Canadian health system. A leadership forum was held for undergraduate fourth year students where experienced leaders in the Fraser Health Authority were invited to speak about their leadership which involved inter-disciplinary engagement to promote organizational change related to the structural determinants of health. However, civic engagement curriculum with other students from different disciplines was not a key theme in the course or forum.

Section Total (66 out of 68)	94.12%
-------------------------------------	---------------

Back to Summary Page [here](#)

Interdisciplinary Research

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

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your <u>institution</u>?	
Yes, there are faculty members at the institution who have a primary research focus in planetary health or sustainable healthcare/vetcare. (3 points)	
Yes, there are individual faculty members at the institution who are conducting research related to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points)	
There are sustainability researchers at the institution , but not specifically associated with healthcare/vetcare. (1 point)	
No, there are no planetary health and/or sustainability researchers at the institution at this time. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p>Trinity Western University has faculty members who have a primary research focus in planetary health. Dr. Barbara Astle is a Professor and Associate Dean of nursing graduate studies and is engaged in planetary health research. Dr. Astle published an education framework to guide the implementation of planetary health education across disciplines and sectors (Astle et al., 2021). Dr. Astle, along with other planetary health research, was at the forefront in creating a topic brief on planetary health and nursing for the International Council of Nursing. At the Canadian national level, Dr. Astle led an online, descriptive survey with analysis in 2024 with the Canadian Association for Schools of Nursing (CASN) and published the results in November 2025 (Astle et al., 2025).</p>	

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 point)	
There is no dedicated department or institute. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p>Trinity Western University hosts an institute dedicated to interdisciplinary research in planetary health. The Centre for Equity and Global Engagement facilitates collaboration among scholars and educators focused on health equity and planetary health. The directors of this institute are Dr. Astle and Dr. Sheryl Reimer-Kirkham. Planetary health remains to be a key point of research at the institute across the faculties at the University and globally. There are plans to develop an institute with the term for planetary health and sustainability in its name which is detailed in metric 2.4.</p>	

2.3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your institution?	
Yes, there is a process in which community members impacted by climate and environmental injustice have decision-making power in the climate + environmental research agenda. (3 points)	
Yes, there is a process in which community members impacted by climate and environmental injustice advise the climate + environmental research agenda. (2 points)	
No , but there are current efforts to establish a process for community members to advise or make decisions on the research agenda. (1 point)	
There is no process, and no efforts to create such a process. (0 points)	
Score Assigned:	2
<p><i>Score explanation:</i></p> <p>Trinity Western University hosted various platforms in which community members impacted by climate and environmental injustice advise the climate and environmental research agenda.</p> <p>A publication by Dr. Astle was informed by persons who experience albinism and experience a disproportionate impact from climate change due to a lack of melanin. Three of the co-researchers are persons who experience albinism and provided input into the research and subsequent research initiatives. This research was presented at an academic conference outlined below.</p> <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 (see metric 2.5).</p> <p>Nursing faculty at TWU are involved in an Indigenous Digital health Ecosystem Project where knowledge keepers are engaged in a learning alliance with research. The goal of this alliance is to integrate information about social determinants of health, such as the lands for Indigenous communities, into a digital health system for Indigenous communities.</p>	

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:

1

Score explanation:

Trinity Western University has a website that centralizes various campus research resources for health and environment-related research. Upcoming events, leading researchers, and funding opportunities are detailed in the website. A section in the website discloses key research areas such as planetary health. An example highlighted are the ecological study areas endowed to the University. The website also details specific plans to open a dedicated centre for planetary health research which could entail a comprehensive website ([evidence](#)).

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

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

Yes, the **institution** has hosted at least one conference or symposium on topics related to sustainable healthcare/vetcare in the past year. (3 points)

Yes, the **institution** has hosted a conference on topics related to planetary health / sustainable healthcare/vetcare in the past three years. (2 points)

The **institution** has not hosted any conferences directly, but they have provided financial support for a local planetary health event. (1 point)

No, the **institution** has not hosted a conference on topics related to planetary health in the past three years. (0 points)

Score Assigned:

4

Score explanation:

In March 2024, the School of Nursing and the Faculty of Natural and Applied Sciences co-hosted a planetary health conference titled “Protecting and Sustaining the Well-Being of our Ecosystems.” The conference had several plenary sessions and scholarly presentations about planetary health ([Evidence](#))

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

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

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

Score Assigned:

1

Score explanation:

Various faculty members of the School of Nursing are registrants of several organizations such as the Alliance and Health Environments, [Planetary Health Alliance](#), [Global Consortium on Climate and Health Education](#), [Canadian Association of Nurses for the Environment and Nursing Climate Change](#). Trinity Western University is an institutional member of the [Canadian Association for Global Health](#) and [Pacific-Northwest Health Equity Network](#).

Section Total (14 out of 17)

82.35%

Back to Summary Page [here](#)

Community Outreach and Advocacy

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

3.1. Does your <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 participates in community focused events relating to planetary health. (1 point)	
No, there is no such meaningful community partnership. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i></p> <p>The School of Nursing 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. This is a partnership with community organizations to promote environmental health knowledge development in undergraduate students.</p> <p>Dr. Astle is a board member for the Pacific-Northwest Health Equity Network (PHEN) (focuses on the climate crisis and equity issues). The provincial group of the "Canadian Association of Nurses for the Environment" (CANE) includes student representation from the School of Nursing.</p> <p>A member of the Planetary Health Report Card team presented a previous PHRC (2024-2025 at the 2026 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 school of nursing is a member in good standing with the CNSA which implies an ongoing, annual partnership with this community organization.</p> <p>Trinity Western Environmental Club, a ratified and funded student club by the University, has established multiple partnerships with the following organizations that promote planetary and environmental health. Ratification of student clubs at TWU is a structured process in which the University endorses the activities of a student club.</p>	

- [Salmon River Enhancement Society](#) - TWU partners with this organization to offer the [Salmon in the Valley School Program](#): a day-camp educating local children on conservation.
- [Langley Environmental Partners Society](#) - 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.
- [Climate Crisis Langley Action Partners \(CCLAP\)](#) - TWU partnered with CCLAP for all candidates meeting. Both co-presidents of TWEC serve on this team.
- [ConVersing/ConServing Project](#) - Incorporates creative writing and poetry into TWEC's sustainability events.
- [A Rocha Canada](#) - This environmental conservation organization partners with TWU, providing volunteer opportunities and internships to students interested in conservation.

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 has not offered such community-facing courses or events. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i> See metric 2.5 for explanation which details how the Planetary Health Conference was open to community members and focused on planetary health across the disciplines.</p> <p>The Trinity Western Environmental Club hosts “Sustainability Week” annually. Events are open to community members.</p>	

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:	2
<p><i>Score explanation:</i></p>	

While Trinity Western University lacks a centralized distribution system for regular coverage for planetary health, the University has a few organizations that do distribute content to all interested students. The undergraduate student newspaper “[Mars Hill](#)” publishes newspapers regularly with several issues of the paper about sustainability at the University and recent sustainability events. The undergraduate student association is the managing stakeholder of the student paper and distributes digital and printed copies campus-wide. The University also publishes [institutional news](#) with some digital news reporting on achievements related to the environment and eco-study areas. The [School of Nursing](#) does publish some digital posts related to planetary health on the program’s instagram.

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

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

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

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

Score Assigned:

2

Score explanation:

Fraser Health, the health authority in which TWU is situated, offers an online course available to all staff members and to the public 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. Mandated by the authority, units across different hospitals may implement unit-specific education for staff members or patients.

Trinity Western University will offer a Planetary Health and Sustainability [certificate](#) in Fall 2026 semester. This is a certificate open to all students and alumni. It involves an in-person curriculum from the School of Nursing and other academic programs which helps to ensure knowledge and skills for planetary health remain relevant in one’s professional career.

See metric 3.5 for additional evidence which provides information about public educational materials .

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

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

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

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

Score Assigned:	2
<p><i>Score explanation:</i> Fraser Health has a website that provides educational digital/printed materials for patients about environmental health exposures. Alerts are also posted to the Fraser Health website about potential health risks in extreme weather events and actions that the public should take. For example, wildfire smoke in the region would trigger a public alert containing accessible education for patients.</p> <p>Fraser Health, the health authority in which TWU is situated, offers an online course available to all staff members and to the public 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. Mandated by the authority, units across different hospitals may implement unit-specific education for staff members or patients.</p> <p>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.</p> <p>Trinity Western University has approved the Planetary Health and Sustainability Certificate. The certificate is offered to current and prospective students.</p>	

3.6. Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about the health impacts of climate change?	
Yes, the institution or all affiliated hospitals have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	2
<p><i>Score explanation:</i> Fraser Health has a website that provides educational digital/printed materials for patients about environmental health exposures. Alerts are also posted to the Fraser Health website about potential health risks in extreme weather events and actions that the public should take. For example, wildfire smoke in the region would trigger a public alert containing accessible education for patients.</p> <p>The Fraser Health Authority is in the process of completing several capital projects in their jurisdiction. Informational boards at hospitals include information about sustainable practices adopted by the health authority to reduce health impacts of climate change. Moreover, Fraser Health’s media coverage frequently highlights the advancements in planetary health in infrastructure and is geared towards public engagement/awareness.</p>	

Section Total (14 out of 14)	100.00%
-------------------------------------	----------------

Back to Summary Page [here](#)

Support for Student-Led Planetary Health Initiatives

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

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

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

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

No, the institution does not offer opportunities or support for sustainability initiatives or QI projects. (0 points)

Score Assigned:

2

Score explanation:

Trinity Western University has an undergraduate student association that has a [committee](#) dedicated to environmental sustainability. A nursing student sits on this committee and has decision-making power for funding allocated to the committee. Funding varies from each year, but typically a minimum of \$5,000 is allocated to the committee. The purpose of the committee is to implement sustainability initiatives across the campus such as recycling campaigns and sustainable transportation advocacy. A recent initiative was the purchase of bicycles for students to borrow for short trips across campus or out of campus.

Furthermore, the student association has a fund that is available to all undergraduate students and undergraduate clubs to fund sustainability-related events. The TWU Environmental Club is a key organizer in these requests alongside individual funding requests. Funding is generally limited to \$500 per semester per student or club.

Within the NURS 227: 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 NURS 227 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. Some fourth year students can re-introduce their learning from NURS 227 in NURS 434. In this course, students can choose a contemporary nursing leadership concern; one of which can be environmentally sustainable practices.

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

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

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

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

Score Assigned:

1

Score explanation:

The School of Nursing has research programs for graduate students interested in doing planetary health research. Graduate students can pursue a research pathway for planetary health among other research programs under nursing faculty. Some graduate research topics include designing sustainable hospitals and planetary health equity.

Trinity Western University lacks a specific research program for students interested in planetary health research; however, there are research opportunities to perform research for planetary health or related to planetary health. These opportunities require student initiative to seek them out and generally are not counted towards degree completion at the undergraduate level. 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. Furthermore, 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. Metric 3.1 shares how a member of the PHRC was able to present a previous report to the national audience at the CNSA.

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

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

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

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

Score Assigned:

1

Score explanation:

There is no dedicated Trinity Western University webpage with specific information related to planetary health or sustainable healthcare. However, there are several media channels in the University that distribute information about activities, projects, and initiatives along with potential mentor contact information. These sources are not frequently updated and do not have a sole focus

on planetary health. Examples include the [University's news page](#), the [research page](#), and the School of Nursing instagram page.

4.4. Does your institution have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?

Yes, there is a student organisation **with faculty support** at my institution dedicated to planetary health or sustainability in healthcare. (2 points)

Yes, there is a student organisation at my institution dedicated to planetary health or sustainability in healthcare but it **lacks faculty support**. (1 point)

No, there is **not** a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points)

Score Assigned:

2

Score explanation:

The Trinity Western University 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. Astle, this student group completes the PHRC and fosters a culture of planetary health engagement among their peers. Students in the PHRC group disseminate report card results at local conferences at the University and in nursing courses such as NURS 227. The student group also meets with the leadership of the School of Nursing to share results and recommendations for planetary health education integration.

TWEC is a student-led environmental group that nursing supports in their sustainability initiatives. This is a ratified student group at the university dedicated to planetary health engagement supported by faculty advisors in the Faculty of Natural and Applied Sciences.

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

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

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

Score Assigned:

1

Score explanation:

The School of Nursing has a planetary health committee with undergraduate student representation. This intra-departmental committee has a purpose of advancing sustainability and planetary health within the School of Nursing; for example, a key focus was greening the nursing labs. The undergraduate student association also has a student-led committee for ecological stewardship. A nursing student was a member of this committee in the recent year. This University and student-led committee discussed environmental sustainability initiatives or concerns on campus.

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></p> <p>4.6.1 - Trinity Western University through the Faculty of Natural and Applied Sciences, offers programs with a key focus on agricultural practices. There are on campus facilities that support student learning in these practices. While priority access is given to students registered in formal courses, these facilities can be accessed by students through the FNAS who maintains these facilities on campus. Furthermore, students can apply to the undergraduate student research award and complete research to gain experience in organic agriculture. In 2024, a student completed a conference poster presentation focused on reducing pesticides.</p> <p>4.6.2 - See metric 2.5 and 3.2 for explanation regarding the Planetary Health Conference. Dr. Teddie Potter of the University of Minnesota School of Nursing was a speaker at the conference for undergraduate students.</p> <p>4.6.3 and 4.6.5 - The TWU Environmental Club hosts several events relevant to this question. The club invites local environmental organizations to speak at club events which are open to all undergraduate students.</p> <p>4.6.4 - As part of March 2024's Planetary Health Conference titled "Sustaining and Sustaining the Wellbeing of our Ecosystems," 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. The School of Arts and Media hosts art exhibitions at the University's art gallery. Some exhibited student art pieces involved planetary health themes.</p> <p>4.6.6 - Trinity Western University recently opened the Outdoor Centre for all students. It is a physical centre that organizes wilderness and outdoor programs such as hiking, kayaking, and group wilderness excursions.</p>	
Section Total (13 out of 15)	86.67%

Back to Summary Page [here](#)

Campus Sustainability

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

5.1. Does your <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 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:	2
<p><i>Score explanation:</i></p> <p>Within the campus facilities operations department at Trinity Western University, there is a salaried grounds manager who monitors ecological and pollutional indicators. There is no formal branch within this department for sustainability; however, the department salaries a “sustainable facility professional” who is responsible for various sustainability initiatives such as a transition from gas-powered heating systems to heat pump systems. This department interacts with the ecological stewardship committee at the undergraduate student association and is influenced by their advocacy.</p>	

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

Score explanation:

Trinity Western University lacks a written and approved plan to achieve carbon neutrality by any of the deadlines. The research department of the University stated in a [strategic research plan](#) that there would be continued efforts in research for planetary health and carbon offsets.

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

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

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

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

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

Score Assigned:

1

Score explanation:

Trinity Western University is located in the Metro Vancouver Regional District which is supplied electricity from the BC Hydro company. This crown corporation produces 98% of their power from clean renewable sources primarily from [hydroelectricity](#). While there is no evidence to suggest that the University has a power purchase agreement, all BC Hydro customers receive electricity from the same grid that transmits renewable energy produced by BC's hydroelectric dams. This implies that all buildings on campus utilise the renewable power network of BC for electricity. Building heating systems are in the transition to electric systems such as heat pumps; however, older buildings in the university rely on natural gas for heating purposes. Student dorms have been the priority for this transition with educational buildings slated for heating system renewal. There are no on-site renewable energy sources at the University.

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

Yes, sustainable building practices are utilised for new buildings on the institution's campus and the **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)

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

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

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

Score Assigned:

2

Score explanation:

Trinity Western University recently approved a campus master plan that outlines sustainable building practices for new buildings or retrofitting existing buildings. Design considerations focus around mass timber practices for new campus buildings. An example of a sustainable building on campus at Trinity Western University is the Rober G. Kuhn building. Energy saving features, mechanical design technology, and mass timber are some key sustainable features that were captured by the campus master plan for future practices in campus development. The majority of buildings on campus, however, are antiquated in sustainable technology.

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:

Trinity Western University has infrastructure that supports safe active transportation and public transportation. For active transportation, the university has installed new LED path lights along campus pedestrian pathways. This encourages students to walk marked paths during the shorter days of the fall and spring semesters around campus. The University also has several bike storage options around campus near student dormitories and educational buildings. Furthermore, the University is a key motivator for local municipal authorities to improve surrounding street infrastructure to include protected bike lanes. For public transportation, the University has a bus loop that serves two bus lines to regional bus exchanges. For environmentally-friendly transportation, the University also has electric car charging stations.

The undergraduate student association also implemented a recent initiative for a shuttle to carpool students to nearby locations such as stores and places of worship. Furthermore, the School of Nursing encourages all students to carpool to clinical placement sites.

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

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

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

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

Score Assigned:	2
-----------------	---

Score explanation:
 All buildings and rooms at Trinity Western University have organic recycling programs and conventional recycling programs. Each classroom has separated bins whereas each floor in a building will have a higher tier of separation that always includes an organic recycling program bin.

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

Yes, the institution has **adequate** 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:	3
-----------------	---

Score explanation:
 Trinity Western University contracts Sodexo to provide campus food and beverage selections. Sodexo has [sustainability criteria](#) when making food or beverage selection. There is a priority for locally sourced food options such as local fisheries. The provider offers several different categories of food options and each food category includes a vegetarian option. Within the University's main cafeteria and ancillary food bars, there is an emphasis on compostable packaging for take-out orders.

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:
 Each academic department outlines specific procurement goals. The School of Nursing, for example, has a sustainable supply procurement program. Biodegradable gloves in nursing labs are a

recent procurement change. Janice Kamke, the School of Nursing Lab Coordinator shared that there are several fiscal barriers that impede upon consistent, sustainable procurement of other supplies. This suggests that these guidelines are optional and that the institution is engaged in efforts to increase sustainability procurement.

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:

Trinity Western University lacks a centralized sustainability requirement for every event hosted at the University. However, individual groups and academic departments are incentivized by budgetary considerations to implement sustainability measures. For example, the School of Nursing co-hosted the Planetary Health Conference with the Faculty of Natural and Applied Sciences and implemented several sustainable practices such as minimizing catering and conference waste. All events on campus are also required to receive catering services from Sodexo which implements its own sustainability requirements such as ceramic cutlery, vegetarian options, and locally sourced foods.

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

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

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

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

Score Assigned:

2

Score explanation:

At Trinity Western University, the School of Nursing has programs and initiatives that assist with making laboratory spaces more environmentally sustainable. Undergraduate nursing students are required to re-use supplies and equipment for different nursing skills. Used supplies are stocked in accessible shelves throughout all nursing practice labs and simulation spaces. All second year nursing students receive a set of supplies and are required to re-use this set of supplies throughout their time in the program. Metric 5.8 speaks to more initiatives from the Nursing Lab Coordinator such as procurement changes for disposable gloves. Other lab spaces at the University such as chemistry labs and art labs employ techniques for re-using similar to the School of Nursing.

5.11. Does your <u>institution's</u> endowment portfolio investments include fossil-fuel companies?	
The institution is entirely divested from fossil fuels and has made a commitment to reinvest divested funds into renewable energy companies or renewable energy campus initiatives. (4 points)	
The institution is entirely divested from fossil fuels. (3 points)	
The institution has partially divested from fossil fuel companies or has made a commitment to fully divest , but currently still has fossil fuel investments. (2 points)	
The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organised advocacy for divestment. (1 point)	
Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that. (0 points)	
Score Assigned:	0
<p><i>Score explanation:</i> Trinity Western University, as a private post-secondary institution, does not have a publicly disclosed investment portfolio. There is no evidence to prove that the University does not invest in fossil-fuel companies. While there is notable concern among students and some faculty members about the prospect of the University investing in fossil-fuel companies, there is no organized advocacy led by students to advocate the University to divest from this aspect of their investment portfolio.</p>	
Section Total (17 out of 32)	53.13%

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%

**Within each grade bracket, a score in the top 5% (_5 to _9%), receives a "+", and a score in the bottom 5% (_0- _4%) receives a "--". For example, a percentage score of 78% would be a B+.*

Planetary Health Grades for the 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 Planetary Health Report Card.

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(66/68) \times 100 = 97.06\%$	A+
Interdisciplinary Research (17.5%)	$(13/17) \times 100 = 82.35\%$	A-
Community Outreach and Advocacy (17.5%)	$(14/14) \times 100 = 100.00\%$	A+
Support for Student-led Planetary Health Initiatives (17.5%)	$(13/15) \times 100 = 86.67\%$	A
Campus Sustainability (17.5%)	$(17/32) \times 100 = 53.13\%$	C
Institutional Grade	$(A \times 0.3 + B \times 0.175 + C \times 0.175 + D \times 0.175 + E \times 0.175) = 85.49\%$	A

Report Card Trends

Section Overview

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

