



Planetary Health Report Card:

Division of Physiotherapy, Faculty of Medicine and Health Sciences

Stellenbosch University, South Africa



Stellenbosch
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forward together
sonke siya phambili
saam vorentoe

2023-2024 Contributing Team:

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Summary of Findings

| | |
|---|------------|
| Overall | B - |
| <u>Curriculum</u> | B - |
| <ul style="list-style-type: none"> • The Division of Physiotherapy at Stellenbosch University has not fully integrated planetary health in the physiotherapy curriculum, but various aspects of planetary health are discussed in lectures in different academic and co-curricular modules. • Recommendations: Planetary health could be included in the Becoming a Health Professional and Becoming a Physiotherapist modules in first and second year as part of global health. Additionally, incorporating planetary health topics in all undergraduate programmes at FMHS could further enhance student interest and involvement in planetary health initiatives at the university. | |
| <u>Interdisciplinary Research</u> | B - |
| <ul style="list-style-type: none"> • Stellenbosch University offers various workshops focused on planetary health, aiming to promote research and discussion in this field. However, these workshops are not specifically tailored for students but rather staff members. • Recommendations: The Public Health division at Stellenbosch University should enhance student engagement in their Planetary Health and Public Square engagements to ensure that students are also actively involved and benefit from these opportunities for learning and networking purposes. Elective courses in planetary health can also be offered by the Faculty of Medicine and Health Sciences and various departments can collaborate to promote interdisciplinary research in planetary health. | |
| <u>Community Outreach and Advocacy</u> | B - |
| <p>The Faculty of Medicine and Health Sciences currently has limited community outreach initiatives related to planetary health. To enhance its impact in this area, the faculty must consider expanding its partnerships with organisations focused on planetary health advocacy. By collaborating with a broader range of groups, the faculty can increase its reach and effectiveness in promoting awareness and education about planetary health. In addition, there is an opportunity to improve patient education on planetary health through the university's websites and within our health facilities. This will empower patients to make informed decisions about their health and the environment. By taking these steps, FMHS can play a more active role in addressing planetary health challenges and promoting a healthier future for all.</p> | |
| <u>Support for Student-Led Initiatives</u> | B - |
| <p>Stellenbosch University as a whole does provide support to student-led initiatives but more work can be done. The Division of Physiotherapy and FMHS can support students by promoting planetary health and encouraging students to take part in planetary health initiatives.</p> | |
| <u>Campus Sustainability</u> | B |
| <p>Stellenbosch University has done tremendous work and invested a lot of money to ensure campus sustainability. As highlighted in our Environmental Sustainability Plan, environmental sustainability needs to be included as a focus area across all aspects of SU's operational management, teaching and research, as articulated in Vision 2040.</p> | |

Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance describes planetary health as “a field focused on characterizing the human health impacts of human-caused disruptions of Earth's natural systems.” This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanization, 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,” the writers could find few examples of integration of planetary health into physiotherapy school’s institutional priorities to 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. Physiotherapists in particular should be adept in considering the environment through which our patients move as the efficacy of physiotherapy treatment is tied to surrounding ecology, including air, water and land. This preparation is in the hands of the institutions providing our physiotherapy training. It is imperative that we hold our institutions accountable for educating physiotherapy 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 color, 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 physiotherapy schools, we have created a Planetary Health Report Card that physiotherapy students in Canada can use to grade and compare their home institutions on an annual basis. This student-driven initiative could be adapted to compare physiotherapy schools nationally and internationally. The current ratings are made on the basis of discrete metrics in five main category areas: 1) planetary health curriculum, 2) interdisciplinary research in health and environment, 3) University support for student planetary health initiatives, and 4) community outreach centered on environmental health impacts 5) physiotherapy 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 physiotherapy school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term “planetary health” to satisfy the metric.
- **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 physiotherapist to protect and promote health is shaped by the dependence of human health on the local and global environment.
- **Physiotherapy School vs. Institution:** When “physiotherapy school” is specified in the report card, this only refers to curriculum and resources offered by the School of Medicine and does not include offerings from other parts of the university (for example, 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. Any resource reasonably accessible by physiotherapy students, no matter where in the institution the resource comes from or if it is specifically targeted for physiotherapy students, can meet this metric.
- **Environmental history (Metric 19 in curriculum section):** This is a series of questions

providers are taught to ask during physiotherapy 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.

- **Elective:** The word “elective” refers to an optional course or lecture series that a physiotherapy 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.
- **Clinical placement:** This is a term used in Canada to refer to placements in clinical settings that physiotherapy students go on e.g., Acute Care, Inpatient Rehab, Pediatric Clinic.
- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.

Other considerations:

- If there are more than one “track” at your physiotherapy school with two different curricula, 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.

This report card has been adapted from a version developed for medical schools internationally. As such, many examples below have been copied and pasted from the 2020 and 2021 school-specific Planetary Health Report Cards and as such, can give you a sense of the level of detail requested in qualitative explanations.

Noted areas for future improvement of the Physiotherapy Planetary Health Report Card: The current draft of the PHRC was adapted by University of Toronto and University of Toronto and McGill University physiotherapy students in their last months of the program. There were several perspectives from whom we did not have the opportunity to garner feedback or contribution in order to shape the Planetary Health Report Card. This includes feedback/contribution from Indigenous elders, community organizers or from students in physiotherapy globally, including from the global south. As a result, this version is largely shaped by and suited to the narrow perspective of settler Canadian physiotherapy students. Future versions of the PHRC should seek to fill these gaps.

Planetary Health Curriculum

Section Overview: *This section evaluates the integration of relevant planetary health topics into the physiotherapy school curriculum. Today's physiotherapy students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that physiotherapy 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 physiotherapy school's core curriculum.*

Please note that the Faculty of Medicine and Health Sciences (FMHS) is based at Stellenbosch University's Tygerberg Campus thus the terms FMHS and Tygerberg may be used interchangeably.

Curriculum: General

| 1. Did your physiotherapy school offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year? | |
|--|---|
| 3 | Yes, the physiotherapy school has offered more than one elective whose primary focus is ESH/planetary health in the past year. |
| 2 | Yes, the physiotherapy school has offered one elective whose primary focus is ESH/planetary health in the past year. |
| 1 | The physiotherapy school does not have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a lecture on planetary health. |
| 0 | No, the physiotherapy school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. |
| The Division of Physiotherapy at Stellenbosch University's Faculty of Medicine and Health Sciences (FMHS) does not offer any electives on planetary health. | |

Curriculum: Health Effects of Climate Change

| 2. Does your physiotherapy school curriculum address the relationship between extreme heat, health risks, and climate change? | |
|--|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |

| | |
|---|-----------------------------|
| 0 | This topic was not covered. |
| <p>In second year, physiotherapy students at the FMHS are required to do the “Shared Humanity” module as part of the Becoming a Physiotherapist (BPT 271) module. One of the primary focus of both the BPT and Shared Humanity modules is social justice. This topic is explored through the lens of our seven faculties and covers various topics including human impacts on the environment, climate change, the burden of disease, education etc. on health. These lectures are delivered by subject matter experts together with world-renowned leaders such as Dr Imtiaz Sooliman (Gift of the Givers), Prof Thuli Madonsela and Prof Tulio de Oliveira to name a few.</p> | |

| 3. Does your physiotherapy school curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems? | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |
| <p>This topic is included in the Global Health theme in the ‘Becoming a Healthcare Professional’ module that physiotherapy students do in their first year.</p> | |

| 4. Does your physiotherapy school curriculum address the impact of climate change on the changing patterns of infectious diseases? | |
|--|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |
| <p>At the Division of Physiotherapy, this topic is included in the Global Health theme in the ‘Becoming a Healthcare Professional’ module in first year and again during Internal Medicine (Infectious Diseases) in second year as part of the Pathology 254 module.</p> | |

| 5. Does your physiotherapy school curriculum address the respiratory health effects of climate change and air pollution? | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |

| | |
|---|--|
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

In second year, physiotherapy students learn about causes and risk factors of diseases (such as physiological, environmental etc) as part of the Anatomical Pathology 241, Pathology 254 and Pathology 334 modules. As part of Internal Medicine in the Pathology 254 module, various respiratory diseases such as asthma, chronic bronchitis, emphysema; respiratory failure; tuberculosis; pneumonia and lung cancers are explored from their aetiology to management, and their relevance to the physiotherapy curriculum. Respiratory health is also included in several cases in Applied Physiotherapy in third and final (fourth) year.

6. Does your physiotherapy school curriculum address the cardiovascular health effects of climate change, including increased heat?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

In second year, physiotherapy students learn about various principles of pathology with special reference to systemic diseases and specific organ pathology as part of the Anatomical Pathology 241, Pathology 254 and Pathology 334 modules. This topic is also included in several cases in Applied Physiotherapy in their third and final (fourth) year.

7. Does your physiotherapy school curriculum address the mental health and neuropsychological effects of environmental degradation and climate change, for example as part of the pain curriculum?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

This topic is not covered in relation to planetary health but Pathology 312 (Psychiatry) is offered as part of the second year physiotherapy curriculum.

8. Does your physiotherapy school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

At the Division of Physiotherapy, this topic is briefly covered in the Global Health theme in the ‘Becoming a Healthcare Professional 1’ module. There is also a Planetary Health lecture offered as part of the ‘Clinical Physiotherapy IV’ module in final year. This lecture is presented by Professor Bob Mash and Dr Christian Lueme.

9. Does your physiotherapy school curriculum address how patterns of colonialism, extractivism, economic exploitation and marginalisation are responsible for producing climate change resulting in an outsized impact on marginalised populations (e.g., low SES, women, communities of colour, Indigenous communities, children, homeless populations, and older adults)?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

The ‘Shared Humanity’ module that second year physiotherapy students have to do as part of the BPT module is “an interdisciplinary module that provides students from different disciplines and faculties an opportunity to engage and address humanitarian challenges of our time” including climate change. The module does not exclusively focus on climate change but on various topics.

10. Does your physiotherapy school curriculum address the unequal regional health impacts of climate change globally?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

In second year, physiotherapy students at the FMHS are required to do the “Shared Humanity” module as part of the Becoming a Physiotherapist (BPT 271) module. One of the primary focuses of both the BPT and Shared Humanity modules is social justice.

This topic is explored through the lens of our seven faculties and covers various topics including human impacts on the environment, climate change, the burden of disease, education etc. on health. These lectures are delivered by subject matter experts together with world-renowned leaders.

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

11. Does your physiotherapy school curriculum address the reproductive health effects of industry-related environmental toxins (e.g., air pollution, pesticides), for example during pediatric or pelvic health curriculum?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

In second year, physiotherapy students learn about various principles of pathology with special reference to systemic diseases and specific organ pathology as part of the Pathology 254 and Pathology 334 modules. In Obstetrics and Gynaecology (Pathology 334), the pathology of the female reproductive functions and their aetiologies are studied and in Pathology 254, environmental factors that affect normal growth and development are explored during Paediatrics.

12. Does your physiotherapy school curriculum address important human-caused environmental threats that are relevant to the university’s surrounding community?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

Only students who are members of special interest groups or organisations (referred to as societies in SU’s context) are exposed to and made aware of human-caused threats to our university or campus surroundings.

13. To what extent does your physiotherapy school emphasize the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?

| | |
|---|---|
| 3 | Indigenous knowledge and value systems are integrated throughout the physiotherapy school's planetary health education |
| 2 | Indigenous knowledge and value systems as essential components of planetary health solutions are included briefly in the core curriculum. |
| 1 | Indigenous knowledge and value systems as essential components of planetary health solutions are included in elective coursework. |
| 0 | This topic was not covered. |

This topic is briefly covered throughout our Being and Becoming module series in first year where students are taught to value and appreciate the knowledge of others. This module series intends to provide disorientating dilemmas and encourages debate, and discussion on solution-finding (innovative) intervention to better the lives of others, our patients and the communities we come from and whom we serve as healthcare professionals. The module does not specifically focus on planetary health but on various topics and themes.

14. Does your physiotherapy school curriculum address the outsized impact of anthropogenic environmental toxins on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, Indigenous populations, and older adults?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |

This is covered again in several topics within the Being and Becoming theme – beginning with global health and multi-sectoral actions for health; to designing health promotion interventions; to participating in service-learning project (community needs analysis, design thing to develop intervention (s); implementation and evaluation thereof).

Curriculum: Sustainability

15. Does your physiotherapy school curriculum address the environmental and health co-benefits of an outdoor activity, active transport and immersion in nature?

| | |
|---|--|
| 3 | This topic was explored in depth by the core curriculum. |
| 2 | This topic was briefly covered in the core curriculum. |

| | |
|--|--|
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |
| These topics are viewed as ‘core business’ and are emphasized in all physiotherapy modules through the four years. | |

| 16. Does your physiotherapy school curriculum address the carbon footprint of healthcare systems? | |
|--|---|
| 3 | This topic was explored in depth by the core curriculum |
| 2 | This topic was briefly covered in the core curriculum. |
| 1 | This topic was covered in elective coursework. |
| 0 | This topic was not covered. |
| The Dean’ Advisory Committee on Environmental Sustainability (DACES) at Stellenbosch University’s Faculty of Medicine and Health Sciences provides workshops to final year Physiotherapy students and this topic is explored in-depth. | |

| 17. Does your physiotherapy school curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (1 point each) | |
|--|---|
| 1 | Waste production within the healthcare system and strategies for reducing waste in clinical activities, such as in the operating room |
| 1 | The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. |
| 1 | The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anaesthesia environmental impacts, such as total intravenous anaesthesia or choosing less environmentally anaesthetic gas options with reduced greenhouse gas emissions |
| 1 | The environmental impact of pharmaceuticals and over-prescribing as a cause of climate health harm. Alternatively teaching on deprescribing where possible and its environmental and health co-benefits would fulfill this metric. |
| 1 | The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes for obesity. This is commonly known as social prescribing in the UK. |
| 1 | The health and environmental co-benefits of avoiding over-physiotherapyisation, over-investigation and/or over-treatment |

1. The Dean’s Advisory Committee on Environmental Sustainability (DACES) provides workshops to final year Physiotherapy students
2. Environmental impacts of pharmaceuticals are learned during pharmacology in third year
3. Social prescribing is our core business and scope of practice as physiotherapists.
4. Overservices is strongly discouraged by the Health Professions Council of South Africa ([HPCSA](#))

Curriculum: Clinical Applications

18. In training for patient encounters, does your physiotherapy school’s curriculum introduce strategies to have conversations with colleagues and patients about the health effects of climate change?

| | |
|---|--|
| 2 | Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum. |
| 1 | Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework. |
| 0 | No, there are not strategies introduced for having conversations with patients about climate change |

Climate change rarely comes up in conversations with our patients and as such, there are no strategies in place.

19. In training for patient encounters, does your physiotherapy school’s curriculum introduce strategies for taking an environmental history or exposure history?

| | |
|---|---|
| 2 | Yes, the core curriculum includes strategies for taking an environmental history. |
| 1 | Only elective coursework includes strategies for taking an environmental history. |
| 0 | No, the curriculum does not include strategies for taking an environmental history. |

This is included in the core curriculum and is considered as the standard of care. This topic is covered in-depth in the theme “Introduction to Evaluation” in the module Physiotherapy Sciences 272. As part of clinical decision-making, it is important to carry out an interview with the patient and ask about their environmental conditions or exposures and other necessary information such as past medical and surgical history (medication, special investigations), general health, social (occupation, sport & living) and social habits. The interview (subjective assessment) is important for assessment and for formulating a probable diagnosis and management plan.

Curriculum: Administrative Support for Planetary Health

| 20. Is your physiotherapy school currently in the process of implementing or improving Education for Sustainable Healthcare (ESH) / planetary health education? | |
|--|---|
| 4 | Yes, the physiotherapy school is currently in the process of making major improvements to ESH/planetary health education. |
| 2 | Yes, the physiotherapy school is currently in the process of making minor improvements to ESH/planetary health education. |
| 0 | No, there are no improvements to planetary health education in progress. |
| <p>FMHS and the University as a whole are environmentally conscious and have invested significantly in sustainability initiatives. Given the campus-wide initiatives and projects students and staff members may participate in, the Division of Physiotherapy has decided not to explicitly include planetary health within the physiotherapy curriculum.</p> | |

| 21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core curriculum? | |
|---|---|
| 6 | Planetary health/ESH topics are well integrated into the core physiotherapy school curriculum. |
| 4 | Some planetary health/ESH topics are appropriately integrated into the core physiotherapy student curriculum. |
| 2 | Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s). |
| 0 | There is minimal/no education for sustainable healthcare. |
| <p>These topics are included in the “Being and Becoming” module series, but also clinical modules and Applied Physiotherapy.</p> | |

| 22. Does your physiotherapy school employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course? | |
|---|--|
| 1 | Yes, the physiotherapy school has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare |
| 0 | No, the physiotherapy school does not have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. |
| <p>There is a staff member (Mrs San Schutz) who is an active representative on the DACES team. She actively promoted sustainability initiatives in the Division of Physiotherapy and does presentations</p> | |

during staff meetings to promote sustainable practices within the division. The planetary health workshop provided to final year students is facilitated by Dr Christian Lueme and Mrs Christine Groenewald.

Section Total (42 out of 69)

B -

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Interdisciplinary Research

Section Overview: *This section evaluates the quality and quantity of interdisciplinary planetary health research at the physiotherapy school and 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, physiotherapy schools 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 emphasized.*

| 1.Are there researchers engaged in planetary health research and healthcare sustainability research at your physiotherapy school? | |
|--|--|
| 3 | Yes, there are faculty members at the School of Physiotherapy who have a primary research focus in planetary health or healthcare sustainability. |
| 2 | Yes, there are individual faculty members at the School of Physiotherapy who are conducting research related to planetary health or healthcare sustainability, but it is not their primary research focus. |
| 1 | There are planetary health and/or healthcare sustainability researchers at the institution, but none associated with the physiotherapy school. |
| 0 | No, there are no planetary health and/or healthcare sustainability researchers at the institution or physiotherapy school at this time. |
| <p>Dr Christian Lueme, a researcher at SU's School for Climate Studies and a lecturer at FMHS conducts research relating to planetary health as this is his focus area. “His research area covers climate change, air pollution and health, sustainable urban health, and climate change migration and human health. His approach focuses on the quantification and prediction of the magnitude of health risk and uncertainties of health care resilience to climate change and air pollution. His current research focuses on planetary health education and integration of planetary health into primary health care and patient care” More information can be obtained here.</p> | |

| 2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution? | |
|---|--|
| 3 | There is at least one dedicated department or institute for interdisciplinary planetary health research. |
| 2 | 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. |
| 1 | There is an Occupational and Environmental Health department, but no interdisciplinary department or institute for planetary health research. |

| | |
|---|--|
| 0 | There is no dedicated department or institute. |
| <p>Stellenbosch University's School of Climate Studies specialises in interdisciplinary and transdisciplinary climate research in Africa. They advocate for and support research that develops Africa-focused agendas to address current and emerging issues in climate change impacts. The school actively seeks to establish new strategic partnerships and collaborations regionally and internationally. The Division of Family Medicine and Primary Care is currently working on formalising the Public Square, aiming to establish it as a structured platform that facilitates collaboration and the integration of research efforts at the Faculty of Medicine and Health Sciences.</p> | |

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 physiotherapy school?

| | |
|---|---|
| 3 | 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. |
| 2 | Yes, there is a process in which community members impacted by climate and environmental injustice advise the climate + environmental research agenda. |
| 1 | No, but there are current efforts to establish a process for community members to advise or make decisions on the research agenda. |
| 0 | There is no process, and no efforts to create such a process. |

Currently there is no process where communities impacted by climate change can give their input about research agendas but the Division of Social Impact does engage with communities who were previously marginalised (historically disadvantaged communities) so that they can contribute to valuable discussions. A similar approach can be implemented for communities impacted by climate change and environmental injustice.

4. Does your institution have a planetary health website that centralizes ongoing and past research related to health and the environment?

| | |
|---|---|
| 3 | There is an easy-to-use, adequately comprehensive website that centralizes 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. |
| 2 | There is a website that attempts to centralize various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive. |
| 1 | The institution has an Office of Sustainability website that includes some resources related to health and the environment. |
| 0 | There is no website. |

There are no dedicated websites specifically for planetary health, but information on these topics can be found on the [Public Health](#) division and the [School for Climate Change](#) websites. Additionally, past research and published materials related to planetary health are accessible through these sources.

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

| | |
|---|--|
| 4 | Yes, the physiotherapy school has hosted at least one conference or symposium on topics related to planetary health in the past year. |
| 3 | Yes, the institution has hosted at least one conference or symposium on topics related to planetary health in the past year. |
| 2 | Yes, the institution has hosted a conference on topics related to planetary health in the past three years. |
| 1 | The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event. |
| 0 | No, the institution has not hosted a conference on topics related to planetary health in the past three years. |

The Public Health Division at FMHS has conducted over five Public Square Workshops in the past year alone, focusing on various aspects of planetary health such as the climate crisis and behavioural change. These workshops also aim to establish research agendas for planetary health within the University.

6. Is your physiotherapy school a member of a national or international planetary health or ESH organization?

| | |
|---|---|
| 1 | Yes, the physiotherapy school is a member of a national or international planetary health or ESH organization |
| 0 | No, the physiotherapy school is not a member of such an organization |

Stellenbosch University's Faculty of Medicine and Health Sciences is part of the [Consortium of Universities for Global Health](#) and the Global Green and Healthy Hospitals Network (GGHH).

| | |
|-------------------------------------|------------|
| Section Total (11 out of 17) | B - |
|-------------------------------------|------------|

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Are there additional research resources offered at your physiotherapy school or institution not yet asked about that you would like to describe? If so, please do so below.

PLANETARY HEALTH DAY

WORKSHOP

An opportunity for interdisciplinary research

Dear researcher

You are invited to a half-day workshop to initiate a research agenda for planetary health at the Faculty of Medicine and Health Sciences, on Wednesday, October 11th 12h00-16h00. The workshop will discuss the research agenda for Planetary Health at the Faculty of Medicine and Health Sciences.

Planetary health studies the health and social effects of our environmental crisis. Research may focus on changes in infectious diseases, non-communicable diseases, nutrition, mental health, injuries and trauma as well as social effects such as migration and displacement. Research may also focus on improving the resilience of health facilities and services or reducing the environmental footprint of the health system.

To date there has been very little research on planetary health in the Faculty and yet this is becoming an increasing area of concern and funding opportunities internationally. This is also an opportunity for interdisciplinary research in collaboration with the School for Climate Studies at Stellenbosch University.

We would like to engage the participants in a dialogue on future research questions and priorities in each disciplinary area and potential interdisciplinary and collaborative research.

DR CHRISTIAN L. LOKOTOLA
Lecturer and Researcher in Planetary Health

PROFESSOR BOB MASH
Head of the Department of Family and Emergency Medicine

PROFESSOR GUY MIDGLEY
Director of the School for Climate Studies

WEDNESDAY - 11 OCTOBER 2023, 12H00 TO 16H30
SEMINAR ROOM 7086B, DIVISION OF FAMILY MEDICINE AND PRIMARY CARE, 7TH FLOOR

Community Outreach and Advocacy

Section Overview: This section evaluates physiotherapy school engagement in community outreach and advocacy efforts associated with planetary health. Researching and teaching planetary health is necessary but not sufficient. It is critical that institutions also directly engage with communities most affected by environmental health harms. Although climate change is a problem largely created by those with power and resources, its impacts fall disproportionately on under-resourced populations and communities of color. 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.

| 1. Does your physiotherapy school partner with community organizations to promote planetary and environmental health? | |
|--|--|
| 3 | Yes, the physiotherapy school meaningfully partners with multiple community organizations to promote planetary and environmental health. |
| 2 | Yes, the physiotherapy school meaningfully partners with one community organization to promote planetary and environmental health. |
| 1 | The institution partners with community organizations, but the physiotherapy school is not part of that partnership. |
| 0 | No, there is no such meaningful community partnership. |
| <p>Stellenbosch University has actively engaged in collaborations with different stakeholders such as the non-profit organisation Greenpop. Recently, the Faculty of Medicine and Health Sciences partnered with fundraising platform GivenGain to raise funds to support the establishment of a garden at Helderberg Hospital in Somerset West. The University also donated a R100 000 Social Impact grant towards this project. Additionally, the faculty collaborates annually with Greenpop to involve students in a Tree Planting festival where more than 5000 trees are planted over the Easter weekend in an effort to restore diversity.</p> <p>Other community outreach initiatives include partnering with local soup kitchens to prepare meals for underprivileged communities using produce from the campus garden and clothing drive initiatives to donate pre-loved clothing to community centres and orphanages.</p> | |

| 2. Does your physiotherapy school offer community-facing courses or events regarding planetary health? | |
|---|--|
| 3 | The physiotherapy school offers community-facing courses or events at least once every year. |
| 2 | The physiotherapy school offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. |

| | |
|---|--|
| 1 | The institution has offered community-facing courses or events, but the physiotherapy school was not involved in planning those courses or events. |
| 0 | The physiotherapy school has not offered such community-facing courses or events. |
| The Faculty of Medicine and Health Sciences does not offer such a course. | |

| | |
|---|--|
| 3. Does your physiotherapy school have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications? | |
| 2 | Yes, all students regularly receive communication updates dedicated to planetary health and/or sustainable healthcare. |
| 1 | Yes, planetary health and/or sustainable healthcare topics are sometimes included in communication updates. |
| 0 | Students do not regularly receive communications about planetary health or sustainable healthcare. |
| <p>Stellenbosch University regularly sends updates and newsletters emphasising the significance of sustainability. The University website is also a valuable resource, providing information that promotes sustainable practices. Additionally, university structures including student bodies, actively communicate using social media posts and campus posters to encourage sustainable efforts. I Mosibudi, a physiotherapy student, have written several articles and reports for the faculty's Media and Marketing division for distribution to students and staff members. Other articles have been published by the Corporate Communications and Marketing Division</p> <p>http://www.sun.ac.za/english/Lists/news/DispForm.aspx?ID=9962 https://www.sun.ac.za/english/Lists/news/DispForm.aspx?ID=10081 https://www.sun.ac.za/english/Lists/news/DispForm.aspx?ID=9667</p> | |

| | |
|---|--|
| 4. Does the institution or any 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? | |
| 2 | Yes, the institution or any 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. |
| 1 | Yes, the institution or any affiliated hospital trust offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers |
| 0 | There are no such accessible courses for post-graduate providers |
| <p>Stellenbosch University provides post-graduate diplomas in planetary health and other short courses. Additionally, the university offers a Diploma in Sustainability and houses a school dedicated to climate</p> | |

studies, which conducts research on current and emerging issues in climate change and its responses. The school also provides training through workshops, short courses, and training events.

5. Does your physiotherapy school or its primary affiliated hospital have accessible educational materials for patients about environmental health exposures?

- 2 Yes, all affiliated hospitals have accessible educational materials for patients.
- 1 Some affiliated hospitals have accessible educational materials for patients.
- 0 No affiliated physiotherapy centres have accessible educational materials for patients.

The University does not provide any accessible materials for patients on the topic of environmental health exposures. However, the Western Cape Department of Health (WC DoH) does provide posters and pamphlets to most of its health facilities. More work still needs to be done in this regard as awareness is mostly about health promotion and prevention of diseases.

6. Does your physiotherapy school or its primary affiliated hospital have accessible educational materials for patients about climate change and health impacts?

- 2 Yes, all affiliated hospitals have accessible educational materials for patients.
- 1 Some affiliated hospitals have accessible educational materials for patients.
- 0 No affiliated hospitals have accessible educational materials for patients.

Our affiliated hospitals and clinics offer informative materials, including posters, that discuss the correlation between health effects and climate change. The University also actively engages in public campaigns, utilising social media platforms to disseminate information and raise awareness about the health effects of climate change.

Section Total (9 out of 14) **B -**



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.

| 1. Does your institution offer support for physiotherapy students interested in enacting a sustainability initiative/QI project? | |
|--|---|
| 2 | Yes, the institution either offers grants for students to enact sustainability initiatives/QI projects or sustainability QI projects are part of the core curriculum. |
| 1 | The physiotherapy school encourages sustainability QI projects (to fulfil clinical placement hours 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. |
| 0 | No, the institution does not offer opportunities or support for sustainability initiatives or QI projects. |

The University does offer grants for sustainable and other student-led initiatives but interested students have to initiate and ensure that funds are utilised for their intended use and in a sustainable manner. Students are also given support in terms of educational workshops and in some cases, students are provided with mentors.

| 2. Does your institution offer opportunities for physiotherapy students to do research related to planetary health and/or sustainable healthcare? | |
|---|---|
| 2 | The institution has a specific research program or fellowship for students interested in doing planetary health/sustainable healthcare research. |
| 1 | There are research opportunities for students to perform research related to planetary health/sustainable healthcare but these require student initiative to seek these out and carry them out in their spare time. |
| 0 | There are no opportunities for students to engage in planetary health/sustainable healthcare research. |

The Undergraduate Research Office ([URO](#)) does provide funding up to the maximum of R5000 to undergraduate students at the Faculty of Medicine and Health Sciences who undertake research, either as a compulsory or an elective component of their degrees. Students who are interested have to contact the relevant faculty member in charge of the office.

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

| | |
|---|---|
| 2 | The physiotherapy school has a webpage with specific information related to planetary health or sustainable healthcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. |
| 1 | There is a physiotherapy school webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the physiotherapy school, but it lacks key information. |
| 0 | There is no physiotherapy-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors. |

The Division of Physiotherapy does not have a webpage where physiotherapy students can find specific information related to planetary health. However, the School of Climate Studies does have one as Planetary Health and Human Security is one of their principle areas of research.

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

| | |
|---|---|
| 2 | Yes, there is a student organisation with faculty support at my physiotherapy school dedicated to planetary health or sustainability in healthcare. |
| 1 | Yes, there is a student organisation at my physiotherapy school dedicated to planetary health or sustainability in healthcare but it lacks faculty support. |
| 0 | No, there is not a student organisation at my institution dedicated to planetary health or sustainability in healthcare. |

The FMHS Dean’s Advisory Committee on Environmental Sustainability (DACES) is a committee made up of students and staff members coordinated by Mrs Christine Groenewald. Its Chairperson, Professor Mash reports to the Dean of the faculty as the committee receives funding from FMHS. DACES also has a student coordinator who liaises with the different Green and Sustainability Committees on the Tygerberg Campus (FMHS). Each residence and our Commuter Student Community (OSLER) have specific “House Committee” members who are responsible for promoting environmental sustainability within residence spaces.

There are also student-led structures such as the Tygerberg Students’ Representative Council (TSRC), the UNASA Stellenbosch Chapter and societies such as EcoMaties (primarily based at the Stellenbosch Campus) that advocate for sustainable living practices. These student-led bodies are supported by bigger university structures such as [Facilities Management](#) and university management (such as the [Rectorate](#) and University Council etc)

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

| | |
|---|--|
| 1 | Yes, there is a student representative that serves on a physiotherapy school or institutional decision-making council/committee. |
| 0 | No, there is no such student representative. |

Michelle Moloto (one of the student contributors) is the current Sustainability Manager for the Tygerberg Students' Representative Council (TSRC) and the portfolio was previously held by me (Mosibudi) in the 2022/2023 term. The TSRC is the highest policy and decision-making student body at the Faculty of Medicine and Health Sciences and one of their mission is to prioritise sustainability as stated in their mission statement.

Similar to the DACES student coordinator, the TSRC Sustainability Manager liaises with all the Green and Sustainability house committee members as they form part of her portfolio committee and she is also a member of DACES. This ensures that all the different student leadership structures are on the same page with regards to sustainability.

The Tygerberg Academics Affairs Council (TAAC) serves as an ex-officio body under the TSRC and they represent the academic interest of all FMHS students on the TSRC and various faculty and university committees. The TAAC was instrumental in the renewal of the MBChB curriculum which saw planetary health being included as part of the first-year curriculum.

6. In the past year, has the institution had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)

| | |
|---|---|
| 1 | 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) |

- The Faculty of Medicine and Health Sciences has a community garden that was established in 2018 to alleviate food insecurity on campus. Excess produce from the garden is donated to soup kitchens that students from the faculty are involved in.
- The Division of Family Medicine and Primary Care at FMHS has had over five workshops with students and members of other departments focusing on various aspects of planetary health to engage in dialogue and promote interdisciplinary research and collaborative research.
- There are various sustainability exhibitions, expos and events that are held regularly at the Stellenbosch Campus by the various societies and university stakeholders.
- Annually, ten students from Tygerberg Campus are selected to attend the Greenpop Reforest Festival which is an annual event where more than 5000 trees are planted in an effort to restore the ecosystem. There is also a faculty-led initiative helmed by Professor Mash to restore the ecosystem at Helderberg Hospital which is one of the university's clinical training sites. For the past two years; students, staff and community members have been involved in restoring the area around the hospital as part of the three-year project between the faculty, Greenpop and the hospital.
- Residence communities regularly go on hikes in and around Cape Town. With May being 'Biodiversity Month' on our sustainability calendar, TSRC Sustainability has their annual hike which gives students especially first years, an opportunity to explore and interact with nature. There are also beach clean-ups that are organised in an effort to help protect marine animals.

Section Total (9 out of 15)

B -



Campus Sustainability

Section Overview: *This section evaluates the support and engagement in sustainability initiatives by the physiotherapy school and/or 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 endeavor, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinizing 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 physiotherapy schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimizing environmental impact.*

| 1. Does your physiotherapy school and/or institution have an Office of Sustainability? | |
|---|---|
| 3 | 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 and/or physiotherapy school. |
| 2 | 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 physiotherapy school and/or hospital sustainability. |
| 1 | There are no salaried sustainability staff, but there is a sustainability task force or committee |
| 0 | There are no staff members or task force responsible for overseeing campus sustainability |
| <p>Stellenbosch University has five full-time staff members that ensure that <u>environmental sustainability</u> at the university is done in a realistic manner. They form part of the environmental sustainability team under SU’s Facilities Management and liaise with different facilities managers to ensure that our sustainability <u>goals</u> are reached. These facilities managers are responsible for the management of waste, water, energy & emissions, construction and biodiversity & land-use at all our five campuses.</p> | |

| 2. How ambitious is your physiotherapy school/institution’s plan to reduce its own carbon footprint? | |
|--|--|
| 4 | The institution has a stated goal of carbon neutrality by 2030 or earlier and the physiotherapy school / institution has a well-defined and adequate plan in place to achieve this goal. |
| 3 | Yes, there is a stated carbon neutrality goal by at least 2040 and the physiotherapy school/institution has a well-defined and adequate plan in place to achieve this goal. |
| 2 | Yes, there is a stated carbon neutrality goal by at least 2040, but the physiotherapy school/institution has not created a plan to reach that goal or the plan is inadequate. |
| 1 | There is a CO2 emission reduction goal, but it is not one of carbon neutrality. |
| 0 | There is no stated goal for reduction of CO2 emissions. |

Stellenbosch University (SU) is on journey to ensure that it achieves carbon neutrality by 2030 and carbon net zero by 2045. The University has adopted its Vision 2040 and Strategic Framework 2019-2024, in which a key priority is the promotion of systemic sustainability in a social, economic and environmental sense to realise the institutional goal of bringing about “profound and sustainable change and regeneration in all facets and functions” at Stellenbosch University. SU has also embarked on another ambitious journey to net zero in 2050 with the launch of the institution's first [Environmental Sustainability Plan](#) (SUESP).

Sustainability is a core component of Stellenbosch University’s strategic programme in which we aim to create a community of sustainable change-makers and empower future leaders to become global citizens.

<https://www.matiemedia.org/r74m-project-included-in-sus-route-to-zero-carbon/>

3. Do buildings/infrastructure used by the physiotherapy school for teaching (not including the hospital) utilize renewable energy?

| | |
|---|---|
| 3 | Yes, physiotherapy school buildings are 100% powered by renewable energy |
| 2 | Physiotherapy school buildings source >80% of energy needs from off-site and/or on-site renewable energy. |
| 1 | Physiotherapy school buildings source >20% of energy needs from off-site and/or on-site renewable energy. |
| 0 | Physiotherapy school buildings source <20% of energy needs from off-site and/or on-site renewable energy. |

With the completion of the new Biomedical Research Institute (BMRI) at Tygerberg Campus, natural light and greywater are being used to reduce water and energy footprint of the building. Light bulbs in buildings have been replaced through energy-saving LED programmes and motion sensors that turn on lights only when there is movement have been installed in the Physiotherapy Division and along corridors in all educational buildings. These prevent lights from burning unnecessarily and therefore reduce our energy consumption. Natural resources, such as trees, are planted in strategic areas to limit heat islands in the landscape and to fixate carbon and there are plans to install more solar PV panels. Currently, the solar PV panels do not provide more than 20% of the energy needs at FMHS.

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

| | |
|---|---|
| 3 | Yes, sustainable building practices are utilised for new buildings on the physiotherapy school campus and the majority of old buildings have been retrofitted to be more sustainable. |
| 2 | Sustainable building practices are utilised for new buildings on the physiotherapy school campus, but most old buildings have not been retrofitted. |

| | |
|--|--|
| 1 | Sustainable building practices are inadequately or incompletely implemented for new buildings. |
| 0 | Sustainability is not considered in the construction of new buildings. |
| <p>The Biomedical Research Institute (BMRI) at SU's Faculty of Medicine and Health was certified with a 4-star rating by the Green Buildings Council of South Africa (GBCSA) and was the first building in the university to receive this certification. Being the single most expensive educational building in the country at a cost of more than R1,2 billion, this state-of-the-art building houses some of the world's cutting-edge facilities and sustainability principles.</p> <p>The construction of the BMRI took 5 years of planning and 4 years of construction. This included the refurbishment of existing buildings such as the FISAN Building, and the construction of new buildings. There was also an expansion of areas and the upgrading of technology and functionalities within the University's medical campus at Tygerberg. The building incorporates energy-efficient systems such as solar panels and rainwater harvesting to reduce its environmental impact.</p> <p>Existing buildings at Tygerberg Campus have been retrofitted and a "green building specialist" has been appointed to help SU's Facilities Management to assure all new projects and major upgrades are designed and constructed to green-star principles. The Tygerberg and Bellville campuses were also recently awarded a 5-star and 3-star rating by the City of Cape Town for effective water management.</p> | |

| | |
|--|---|
| 5. Has the physiotherapy school implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting? | |
| 2 | Yes, the physiotherapy school 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. |
| 1 | The physiotherapy school has implemented some strategies to provide environmentally-friendly transportation options, but the options are unsatisfactorily accessible or advertised. |
| 0 | The physiotherapy school has not implemented strategies to encourage and provide environmentally-friendly transportation options. |
| <p>There is free campus shuttle offered by the university that operates from Monday to Saturday to transports students (and staff members) to the mall and surrounding areas. Students who do not live on-campus (in university residences) and staff members can also use the shuttle to be transported home in the evening provided that they stay within a 6km radius. There are also plans to provide a shuttle between the Tygerberg and Stellenbosch campuses as most students from Tygerberg commute to and from Stellenbosch daily for academic, co-curricular and extra-curricular activities.</p> <p>Since Tygerberg is a fairly 'small' campus and is gated unlike the Stellenbosch campus that is integrated within the town itself, most students walk around Tygerberg campus with a small number of students using bicycles or skateboards. Tygerberg Hospital, our primary clinical training site is a short distance away and is linked to the campus via the ground floor. Shuttles are provided by the university</p> | |

to get to and from other clinical sites that are not in close proximity and we are encouraged by the division to make use of these shuttles to save both money and time. Those who wish to use their own cars to get to clinical sites are encouraged to carpool but they will be doing so at their own cost. Vehicles are also made available by [SUNLOC](#) to students who have clinical rotations outside of Cape Town.

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

| | |
|---|---|
| 2 | Yes, the physiotherapy school has both compost and recycling programs accessible to students and faculty. |
| 1 | The physiotherapy school has either recycling or compost programs accessible to students and faculty, but not both. |
| 0 | There is no compost or recycling program at the physiotherapy school. |

All buildings at Tygerberg campus make use of the 3-bin system meaning waste sorting actually start with individuals. The 3-bin systems are strategically placed by [Facilities Management](#) especially in areas where there is a lot of foot traffic. There are three [waste](#) sorting facilities on campus and waste is collected weekly for recycling after it has been sorted. Only non-recyclable waste is sent to landfill sites. Old tree branches are trimmed and turned into mulch using chipper shredders, and organic waste is collected from bins, kitchens and cafeterias to make compost using Bokashi bran.

At present, over 80% of all general waste from the Stellenbosch, **Tygerberg** and Bellville Park campuses is diverted for recycling and 70% is actually recycled.

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

| | |
|---|---|
| 3 | Yes, the physiotherapy school 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. |
| 2 | There are sustainability guidelines for food and beverages, but they are insufficient or optional. The physiotherapy school is engaged in efforts to increase food and beverage sustainability. |
| 1 | There are sustainability guidelines for food and beverages, but they are insufficient or optional. The physiotherapy school is not engaged in efforts to increase food and beverage sustainability. |
| 0 | There are no sustainability guidelines for food and beverages. |

Tygerberg Campus only has ‘shops’ within the student centre (TSS) and no “street vendors” as it is a gated campus; thus the university can regulate who can provide and sell meals to students and staff members. The faculty and the university as a whole have adequate sustainability requirement for

service providers and certain requirements have to be fulfilled for food providers to continue rendering services. According to Mrs Christine Groenewald, yearly questionnaires must be filled in by service providers. The ingredients that they use must be locally sourced and packaging should be sustainable. Students and staff members are offered discounts when they bring their own mugs to buy coffee at Vida e Caffè and students who bring their own containers to collect booked meals from the cafeteria do not pay an extra fee for ‘takeaway’ unlike those who opt for pre-packaged meals.

8. Does the physiotherapy school or associated institution apply sustainability criteria when making decisions about supply procurement?

| | |
|---|--|
| 3 | Yes, the physiotherapy school has adequate sustainability requirements for supply procurement and is engaged in efforts to increase sustainability of procurement. |
| 2 | There are sustainability guidelines for supply procurement, but they are insufficient or optional. The physiotherapy school is engaged in efforts to increase sustainability of procurement. |
| 1 | There are sustainability guidelines for supply procurement, but they are insufficient or optional. The physiotherapy school is not engaged in efforts to increase sustainability of procurement. |
| 0 | There are no sustainability guidelines for supply procurement. |

There are policies, procurement plans and guidelines to guide with purchasing sustainable goods and services but they are insufficient. A lot of work still needs to be done in this regard and the university has set targets for itself to ensure that sustainable procurement criteria are developed and included in the procurement policy by 2024 with goods and services being procured from local suppliers that meet these guidelines. Stellenbosch University is also committed to ensuring that a monitoring system is in place to measure progress and the impact of our procurement process on society and the environment. The current procurement policy can be found [here](#).

9. Are there sustainability requirements or guidelines for events hosted at the physiotherapy school?

| | |
|---|--|
| 2 | Every event hosted at the physiotherapy school must abide by sustainability criteria. |
| 1 | The physiotherapy school strongly recommends or incentivizes sustainability measures, but they are not required. |
| 0 | There are no sustainability guidelines for physiotherapy school events. |

There are sustainability guidelines but they are not ‘really’ official and thus cannot be enforced especially with events hosted by staff members. Students are however encouraged to follow these guidelines within their residence spaces for examples not buying single-use items for events that they host. There are plans to make these a requirement but as it currently stands, they are merely recommendations.

| 10. Does your physiotherapy school have programs and initiatives to assist with making lab spaces more environmentally sustainable? | |
|---|---|
| 2 | Yes, the physiotherapy school has programs and initiatives to assist with making lab spaces more environmentally sustainable. |
| 1 | There are guidelines on how to make lab spaces more environmentally sustainable, but not programs or initiatives. |
| 0 | There are no efforts at the physiotherapy school to make lab spaces more sustainable. |
| <p>Almost all the laboratories at Tygerberg Campus are located at the BMRI and with sustainability at the heart of its design, the building has unique architectural features which include a smart lighting system that detects areas where natural light is strongest and adjust lighting accordingly, thus drawing less electricity from the grid. All toilets make use of non-portable water and deployment of smart technologies, rainwater harvesting and community access to the facility have all been designed to evolve with the building as the way we do research changes in the future. Students are encouraged to minimise their energy consumption and dispose of waste responsibly especially biohazardous waste.</p> | |

| 11. Does your institution's endowment portfolio investments include fossil-fuel companies? | |
|--|---|
| 4 | 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. |
| 3 | No, the institution is entirely divested from fossil fuels. |
| 2 | The institution has partially divested from fossil fuel companies or has made a commitment to fully divest, but currently still has fossil fuel investments. |
| 1 | The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organised advocacy for divestment. |
| 0 | Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that. |
| <p>The University has not divested from fossil-fuel companies but there has been a lot of engagement and advocacy by student-led bodies. Most of the advocacy for a fossil-free SU was done by Die Matie, our student newspaper and the EcoMaties society.</p> <p>More news regarding fossil-fuel divestment can be found here</p> | |

| | |
|-------------------------------------|------------|
| Section Total (23 out of 31) | B - |
|-------------------------------------|------------|

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+.*

[Click [here](#) to calculate your score]

Planetary Health Grades for the Division of Physiotherapy at Stellenbosch University

The following table presents the individual section grades and overall institutional grade for Stellenbosch University’s Division of Physiotherapy on this physiotherapy-school-specific PHRC

| Section | Raw Score | Letter Grade |
|---|---------------------------------|--------------|
| Planetary Health Curriculum (30%) | $(42 / 69) \times 100 = 60.8\%$ | B- |
| Interdisciplinary Research (17.5%) | $(11 / 17) \times 100 = 64.7\%$ | B- |
| Community Outreach and Advocacy (17.5%) | $(9 / 14) \times 100 = 64.3\%$ | B- |
| Support for Student-led Planetary Health Initiatives (17.5%) | $(9 / 15) \times 100 = 60\%$ | B- |
| Campus Sustainability (17.5%) | $(23 / 31) \times 100 = 74.2\%$ | B |
| Institutional Grade | 64.3% | B- |

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