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# **Planetary Health Report Card**

## ***University of Cape Town (UCT)***

### ***Faculty of Health Sciences (FHS)***

#### **(Medicine/ Health & Rehabilitation Sciences)**

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## Summary of Findings

<b>Overall</b>	<b>C</b>
<b><u>Curriculum</u></b>	<b>C</b>
<ol style="list-style-type: none"> <li>Planetary health (PH) and sustainable healthcare (SH) topics are included in the FHS medical (MBChB) and health and rehabilitation sciences (HRS) programmes. Chronic curriculum overload; ‘siloes’ learning and timetabling; and low consciousness among educators are key barriers to integration however.</li> <li>There is growing awareness of the need for SH, despite insufficient leadership; few ‘best-practice’ examples; and the general priority given to cost-cutting over an ethic of sustainability.</li> <li><b>Recommendations:</b> <ol style="list-style-type: none"> <li>Adopt trans-disciplinary and inter-faculty approaches towards integration of PH and SH</li> <li>Incorporate indigenous ecological knowledge and values into curriculum design and delivery</li> <li>Integrate PH and SH into foundational year lectures and problem-based learning (PBL) cases</li> <li>Teach clinical educators about SH for more sustainable practice in clinical teaching environments</li> </ol> </li> </ol>	
<b><u>Interdisciplinary Research</u></b>	<b>C</b>
<ol style="list-style-type: none"> <li>UCT’s <i>Khusela Ikamva</i> (“Secure the Future”) Sustainable Campus project is developing a diverse community of practice that is informed by leading research.</li> <li><b>Recommendations:</b> <ol style="list-style-type: none"> <li><i>Khusela Ikamva</i> should include more FHS researchers.</li> <li>The FHS should seek local and international partners in PH research.</li> </ol> </li> </ol>	
<b><u>Community Outreach and Advocacy</u></b>	<b>D+</b>
<ol style="list-style-type: none"> <li>There is little awareness-raising and advocacy by the FHS to protect local communities’ health from environmental and climate threats, and to promote more sustainable healthcare.</li> <li><b>Recommendations:</b> <ol style="list-style-type: none"> <li>Develop more active community partnerships that address environmental health threats.</li> <li>Produce educational materials about how to mitigate climate-health impacts.</li> </ol> </li> </ol>	
<b><u>Support for Student-Led Initiatives</u></b>	<b>D-</b>
<ol style="list-style-type: none"> <li>The FHS provides little support and no funding for PH and SH-related student projects.</li> <li><b>Recommendations:</b> <ol style="list-style-type: none"> <li>Offer opportunities for quality improvement (QI) and community-based sustainability projects.</li> <li>Collaborate with student leaders for sustainability in curricula development and campus operations.</li> </ol> </li> </ol>	
<b><u>Campus Sustainability</u></b>	<b>C-</b>
<ol style="list-style-type: none"> <li>UCT’s Environmental Sustainability Strategy has a goal of a net zero carbon, water and waste-to-landfill campus by 2050 or sooner, led by a Director of Sustainability.</li> <li>Waste recycling is promoted; and sustainable water management is practised, but without effective monitoring and evaluation. Renewable energy use is low and green building standards are not prevalent.</li> <li>A pilot orientation course is being transformed into a ‘sustainability literacy’ course for all faculties.</li> <li><b>Recommendations:</b> <ol style="list-style-type: none"> <li>Increase energy efficiency and solar power on new green building projects.</li> <li>Increase training and promotion of waste recycling.</li> <li>Evaluate the pilot orientation course on sustainability.</li> </ol> </li> </ol>	

# 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 analyzing 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, 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,” many medical school’s institutional priorities do not reflect the urgency of this danger to human health.

As future health professionals, we must be prepared to address the impacts of human-caused environmental changes on our patients’ health. This preparation is in the hands of the institutions providing our medical training. It is imperative that we hold our institutions accountable for educating medical students about the health impacts of climate change and other anthropogenic environmental changes, generating research to better understand health impacts and solutions, supporting related student initiatives, embracing sustainable practices as much as possible, and engaging with surrounding communities that are most affected by environmental threats. Because climate change and environmental threats disproportionately affect vulnerable populations (for example, communities of 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 medical schools, we have created a Planetary Health Report Card that medical students internationally can use to grade and compare their home institutions on an annual basis. This medical-student-driven initiative aims to compare medical schools nationally and internationally on the basis of discrete metrics in five main category areas: 1) planetary health curriculum, 2) interdisciplinary research in health and environment, 3) university support for student planetary health initiatives, and 4) community outreach centered on environmental health impacts 5) medical school campus sustainability.

# Definitions & Other Considerations

## Definitions:

- **Planetary Health:** is described by the Planetary Health Alliance as “the health of human civilisation and the state of the natural systems on which it depends.” For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional ‘environmental health’ examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of medical school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term “planetary health” to satisfy the metric.
- **Sustainable Healthcare:** As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.
- **Education for Sustainable Healthcare (ESH):** is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
  1. Describe how the environment and human health interact at different levels.
  2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
  3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- **Medical School vs. Institution:** When “medical 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 (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. Any resource reasonably accessible by medical 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 (Metric #19 in Curriculum Section):** This is a series of questions providers 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 mold after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution.
- **Elective:** The word "elective" refers to an optional course or lecture series that a medical student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- **Clerkship:** 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 or placements.

**Other considerations:**

- If there are more than one "tracks" at your medical school 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).

**Added to our resources last year, the Planetary Health Report Card [Literature Review by Metric](#) collates the evidence behind each of the metrics in the Planetary Health Report Card. It serves as a collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.**

# Planetary Health Curriculum

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

1. Did your <u>medical school</u> offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
3	Yes, the medical school has offered <b>more than one</b> elective whose primary focus is ESH/planetary health in the past year.
2	Yes, the medical school has offered <b>one</b> elective whose primary focus is ESH/planetary health in the past year.
1	The medical school does <b>not</b> have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a <b>lecture</b> on planetary health.
0	No, the medical school has <b>not</b> offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.
<p><i>A few medical student electives (4-week clerkships or placements in year 5 or year 6) are offered every year that incorporate principles of Sustainable Quality Improvement (QI) in clinical care (medical students also receive a lecture on QI in their 4th year Public Health rotation). A few electives have been hosted in recent years by Future Water, a UCT research institute for sustainable water use.</i></p>	

## Curriculum: Health Effects of Climate Change

2. Does your <u>medical school</u> curriculum address the relationship between extreme heat, health risks, and climate change?	
3	This topic was explored <b>in depth</b> by the <b>core</b> curriculum.
2	This topic was <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in <b>elective</b> coursework.
0	This topic was <b>not</b> covered.
<p><i>Extreme heat is briefly covered as one of several climate impacts on health in introductory lectures on Climate Change and Health in MBChB year 3 (Critical Health Humanities (CHH) course in semester 5), and MBChB year 4 (Health in Context (HiC) course).</i></p>	

**3. Does your medical school curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?**

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

*CHH lectures in semester 3 cover impacts of increased droughts, storms, and flooding on food security and water-borne diseases e.g., recent extreme weather events in Mozambique.*

**4. Does your medical school curriculum address the impact of climate change on the changing patterns of infectious diseases?**

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

*The topic is covered in CHH semester 3 learning outcomes, lectures and required readings. Students consider the case of an adolescent with asthma and the impacts of climate change and related social structures on her illness experience. Readings help them understand the link between climate-health impacts, global economic orders, and existing health and social class inequalities in South Africa. The topic is also included in lectures on Climate change and health in MBChB year 3 (CHH) and year 4 (HiC)*

**5. Does your medical school curriculum address the respiratory health effects of climate change and air pollution?**

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

*CHH in MBChB year 3 has a case and a lecture about a young woman with asthma who has to miss school. It raises questions about respiratory-related illnesses linked to the environmental causes of the climate crisis e.g., coal-fired power stations; inequitable impacts of coal mining on miners and their widows. It is also included in lectures on Climate change and health in MBChB year 3 (CHH) and year 4 (HiC)*

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

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

*Cardiovascular health effects are only mentioned among climate-health impacts in lectures on Climate change and health in MBChB year 3 (CHH) and year 4 (HiC)*

**7. Does your medical school curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?**

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

*Mental health impacts of climate change are not covered in depth nor are they well-articulated. The CHH case (Hope for an unhealthy planet) provides a theoretical hope and idea of what can be done; and a reading around ecofeminism and climate change was chosen to counter grief from learning about the climate crisis.*  
*The topic is also mentioned in lectures on Climate change and health in MBChB year 3 (CHH) and year 4 (HiC)*

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

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

*In CHH there is discussion around chronic poverty and structural violence and the impact on people's health. The complex issues of food and water security are linked to land security; and ecosystem health is linked to prevalent unemployment, and environmentally damaging activities like mining, in South Africa. These issues are not always explicitly linked to climate change in lectures, however. Malnutrition is mentioned among climate-health impacts in lectures on Climate change and health in MBChB years (CHH) and year 4 (HiC).*  
*There is also some coverage in the MBChB year 2 Becoming a Doctor (BaDr) course.*



**9. Does your medical school curriculum address the outsized impact of climate change on marginalized populations such as those with low SES, women, communities of color, Indigenous communities, children, homeless populations, and older adults?**

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

*In CHH there are required readings and a case about marginalised people being forced off land and denied access to employment. Pre-class exercises on one's ecological footprint, and slavery footprint are linked specifically to respiratory illnesses and our throwaway culture. In a year 4 MBChB HiC lecture, vulnerable groups in the Western Cape province are identified in a few slides about the Western Cape Climate Change Response Strategy (WCCCRS) and the local and regional context of climate-health impacts.*

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

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

*A literature review of climate-health impacts that informed the WCCCRS is an optional reading for problem-based learning (PBL) groups.*

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

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

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

*In CHH there is one resource about toxic chemicals in breastmilk, and there is one mention in a Climate change and health lecture slide about the reproductive health impacts of air pollution.*

Otherwise the effects are addressed primarily in the Post Graduate Diploma in Pesticide Risk Management (MG012), or the Masters in Chemicals Risk Management (MM037).

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

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

*All health sciences students go on community visits in their first year (e.g. Becoming a Health Professional course). These are intended to sensitise them to the environmental health challenges of surrounding low-income communities, such as pollution, poor sanitation, structural violence, and substandard housing. The curriculum doesn't fully address these challenges and potential solutions however.*

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

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

*Attempts are being made to include indigenous knowledge in curricula, and different students have experienced different components of indigenous knowledge. There is a brief talk about cultural humility, but no emphasis on indigenous knowledge for planetary health solutions.*

**14. Does your medical 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 <b>in depth</b> by the <b>core</b> curriculum.
2	This topic was <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in <b>elective</b> coursework.
0	This topic was <b>not</b> covered.

*In CHH there is a direct link to the topic in the respiratory cases; the mining-related impacts, eco-feminism, and socio-economic impacts are covered in class discussions on the premature deaths of mine workers. The differential child impacts reference the WHO 2017 statistics on respiratory deaths.*

### **Curriculum: Sustainability**

#### **15. Does your medical school curriculum address the environmental and health co-benefits of a plant-based diet?**

3	This topic was explored <b>in depth</b> by the <b>core</b> curriculum.
2	This topic was <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in <b>elective</b> coursework.
0	This topic was <b>not</b> covered.
<p><i>This topic is covered in-depth, relative to others. In CHH the cardiovascular case has required readings, a lecture, PBL discussions, and an elective assignment on Climate change and meat and health. The Meat and Masculinities lecture examines gendered responses to health-seeking behaviours, and the associations of masculinity with meat.</i></p>	

#### **16. Does your medical school curriculum address the carbon footprint of healthcare systems?**

3	This topic was explored <b>in depth</b> by the <b>core</b> curriculum
2	This topic was <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in <b>elective</b> coursework.
0	This topic was <b>not</b> covered.
<p><i>The Global Green and Healthy Hospital (GGHH) agenda and some local SH initiatives are described in lectures on Climate change and health in MBChB year 3 (CHH) and MBChB year 4 (HiC).</i></p>	

#### **17. Does your medical school curriculum cover these components of sustainable clinical practice in the core curriculum? (points for each)**

2	The health <b>and</b> environmental <b>co-benefits</b> of <b>avoiding</b> over-medicalisation, over-investigation and/or over-treatment
2	The environmental impact of <b>pharmaceuticals</b> and over-prescribing as a cause of climate health harm. Alternatively teaching on <b>deprescribing</b> where possible and its environmental and health co-benefits would fulfil this metric.
1	The health <b>and</b> environmental <b>co-benefits</b> of <b>non-pharmaceutical management</b> of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities

	such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK.
1	Environmental impact of <b>surgical</b> healthcare on planetary health and the climate crisis, and how can it be mitigated
1	The impact of <b>anaesthetic</b> gases on the healthcare carbon footprint and ways to reduce anaesthesia environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions
1	The impact of <b>inhalers</b> on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers.
1	<b>Waste production</b> within healthcare <b>clinics</b> and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting)
	<i>In CHH, there are Physiotherapy year 3 group presentations about how the themes link to discipline-specific education, research or practice e.g. a student art exhibition related to the climate crisis and neoliberalism, focused on respiratory illnesses. MBChB students in CHH have essay options which include alternative therapies, although with no specific requirement to discuss the environmental co-benefits.</i> <i>In the MBChB year 2 Becoming a Doctor (BaDr) course, non-pharmaceutical management of low back pain includes exercise, stretching, sleep and mental wellness, but with little reference to environmental co-benefits.</i>

### *Curriculum: Clinical Applications*

<b>18. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies to have conversations with patients about the health effects of climate change?</b>	
2	Yes, there are strategies introduced for having conversations with patients about climate change in the <b>core</b> curriculum.
1	Yes, there are strategies introduced for having conversations with patients about climate change in <b>elective</b> coursework.
0	No, there are <b>not</b> strategies introduced for having conversations with patients about climate change
<i>There are no strategies for such conversations in CHH, but some role-modelling e.g. Physiotherapy groupwork about the climate crisis and specific health concerns; the MBChB 'eco-warrior' case. There is limited opportunity to develop these conversations in Primary Health Care (PHC) tutorials in clinical settings in MBChB year 4.</i>	

<b>19. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies for taking an environmental history or exposure history?</b>	
2	Yes, the <b>core</b> curriculum includes strategies for taking an environmental history.
1	Only <b>elective</b> coursework includes strategies for taking an environmental history.

0	No, the curriculum does <b>not</b> include strategies for taking an environmental history.
<i>Environmental history-taking is one of the learning objectives of the BaDr course. It is also covered in the MBChB year 4 HiC course with reference to standard approaches in the literature.</i>	

***Curriculum: Administrative Support for Planetary Health***

<b>20. Is your <u>medical school</u> currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?</b>	
4	Yes, the medical school is currently in the process of making <b>major</b> improvements to ESH/planetary health education.
2	Yes, the medical school is currently in the process of making <b>minor</b> improvements to ESH/planetary health education.
0	No, there are <b>no</b> improvements to planetary health education in progress.
<i>There are some promising developments that are yet to be fully realised. There are conversations about transdisciplinary educational options; and the current transformation of undergraduate curricula provides an opportunity for major improvements.</i>	

<b>21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> curriculum?</b>	
6	Planetary health/ESH topics are <b>well integrated</b> into the core medical school curriculum.
4	<b>Some</b> planetary health/ESH topics are appropriately integrated into the core medical student curriculum.
2	Planetary health/ESH is not integrated and is primarily addressed in <b>(a) standalone lecture(s)</b> .
0	There is <b>minimal/no</b> education for sustainable healthcare.
<i>CHH has more than standalone lectures but the topics are not fully integrated yet. In the other courses PH and SH topics are mostly addressed in standalone lectures, as described above</i>	

<b>22. Does your <u>medical school</u> employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?</b>	
1	<b>Yes</b> , the <b>medical school</b> has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare
0	<b>No</b> , the <b>medical school</b> does <b>not</b> have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare.

*Only enthusiasts at this stage are taking responsibility. It is hoped that the compilation of this baseline PHRC is an important step.*

**Section Total (39 out of 72)**

**54%**

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- Dr Nisha Jacob; Health in Context (HiC) course convener
- Dr Diane Matthews, BaDr & Year 2 co-convener

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

*NONE*

# Interdisciplinary Research

***Section Overview:*** *This section evaluates the quality and quantity of interdisciplinary planetary health research at the medical 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, medical 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 <b>medical school</b> ?	
3	Yes, there are faculty members at the <b>medical school</b> who have a <b>primary</b> research focus in planetary health <b>or</b> healthcare sustainability.
2	Yes, there are individual faculty members at the <b>medical school</b> who are conducting research <b>related</b> 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 <b>institution</b> , but none associated with the medical school.
0	No, there are <b>no</b> planetary health and/or healthcare sustainability researchers at the <b>institution</b> or <b>medical school</b> at this time.
<p><i>There is a faculty member (JI) in the Division of Environmental Health with a primary research focus in educating health professionals about planetary health and healthcare sustainability. There are Masters in Public Health and some post-doctoral students doing research relating to planetary health, but no undergraduates.</i></p>	

2. Is there a dedicated department or institute for interdisciplinary planetary health research at your <b>institution</b> ?	
3	There is <b>at least one</b> dedicated department or institute for interdisciplinary planetary health research.
2	There is <b>not currently</b> a department or institute for interdisciplinary planetary health research, but there are <b>plans</b> to open one in the next 3 years.
1	There is an <b>Occupational and Environmental Health department</b> , but no interdisciplinary department or institute for planetary health research.
0	There is <b>no</b> dedicated department or institute.
<p><i>Within the Faculty's <a href="#">School of Public Health</a>, there is a <a href="#">Division of Environmental Health</a>, a <a href="#">Division of Occupational Medicine</a>, and a <a href="#">Centre for Environmental and Occupational Health Research (CEOHR)</a>. Research related to climate change has included pest infestations and vector borne disease; endocrine-disrupting chemicals; occupational heat stress; air quality; and occupational health and safety in aquaculture.</i></p>	

Research institutes of the wider university that include different aspects of planetary health, include the [African Climate Development Initiative \(ACDI\)](#), the [Climate System Analysis Group \(CSAG\)](#), the [African Centre for Cities \(ACC\)](#), and the [Future Water Institute](#). There is limited collaboration with FHS researchers however.

**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 medical school?**

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

*The African Climate Development Initiative (ACDI) recognises indigenous knowledge and engages communities in its research projects in different ways e.g. the Berg-Breede area project is working with role players from government, NGOs and others to co-develop a research agenda.*

*The Future Water Institute runs engagement workshops for large projects to advise on mitigating the health impacts of extreme weather events, such as flooding and storms e.g. Health vulnerability indicators (HVI) for residents in at-risk communities; the UK Research and Innovation (UKRI) Global Challenges Research Fund (GCRF) Water and Fire project.*

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

*UCT's [Khusela Ikamva \("Secure the Future"\) Sustainable Campus Project](#) aims to catalyse its transformation into a sustainable campus by establishing a community of practice informed by leading research that incorporates UCT stakeholders; extensive and inclusive engagement with the university community; and 'proof-of-concept' Living Lab interventions on campus over the next 5 years.*

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



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

*UCT hosted the [International Summit on the SDGs in Africa 2021](#) to mobilize collaborative efforts to accelerate African-led activities in support of achieving the Sustainable Development Goals and the African Union's Agenda 2063. There was nothing specifically on health however.  
UCT FHS co-hosted the international society for environmental epidemiology conference (Africa chapter) in July 2022*

6. Is your <b>medical school</b> a member of a national or international planetary health or ESH organization?	
1	Yes, the medical school is a member of a national or international planetary health or ESH organization
0	No, the medical school is <b>not</b> a member of such an organization

*A faculty member in the Division of Environmental Health founded and chairs the national [Education for Sustainable Healthcare \(ESH\) Special Interest Group of the Southern African Association of Health Educationalists \(SAAHE\)](#).  
The FHS is a member of SAAHE, and some faculty members belong to the ESH Interest Group in their individual capacities.*

Section Total (9 out of 17)	53%
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#### Acknowledgements:

- Dr Amber Abrams; Future Water UCT
- Prof Sheona Shackleton; Deputy Director; African Climate & Development Initiative (ACDI)
- Ms Carlette Hlungwani; Manager: UCT FHS Research Intelligence

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

NONE

# Community Outreach and Advocacy

***Section Overview:*** *This section evaluates medical school engagement in community outreach and advocacy efforts associated with planetary health. Researching and teaching planetary health is necessary but not sufficient. It is critical that institutions also directly engage with communities most affected by environmental health harms. Although climate change is a problem largely created by those with power and resources, its impacts fall disproportionately on under-resourced populations and communities of 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 <b>medical school</b> partner with community organizations to promote planetary and environmental health?	
3	Yes, the <b>medical school</b> meaningfully partners with <b>multiple</b> community organizations to promote planetary and environmental health.
2	Yes, the <b>medical school</b> meaningfully partners with <b>one</b> community organization to promote planetary and environmental health.
1	The <b>institution</b> partners with community organizations, but the medical school is not part of that partnership.
0	No, there is <b>no</b> such meaningful community partnership.
<p><i>Most departments have community placements to teach students about the social, economic, and environmental context of health, and to encourage their active engagement with community needs. There have been past community projects related to environmental sustainability (in Occupational Therapy and in Public Health), however there are no current partnerships with community organisations that specifically promote planetary and environmental health.</i></p>	

2. Does your <b>medical school</b> offer community-facing courses or events regarding planetary health?	
3	The <b>medical school</b> offers community-facing courses or events at least once every year.
2	The <b>medical school</b> 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 <b>institution</b> has offered community-facing courses or events, but the <b>medical school</b> was not involved in planning those courses or events.
0	The <b>institution/medical school</b> have not offered such community-facing courses or events.

3. Does your <b>medical school</b> have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?	

2	Yes, all students <b>regularly</b> receive communication updates dedicated to planetary health and/or sustainable healthcare.
1	Yes, planetary health and/or sustainable healthcare topics are <b>sometimes</b> included in communication updates.
0	Students <b>do not</b> receive communications about planetary health or sustainable healthcare.
<i>General campus communication does sometimes encourage sustainable habits e.g. saving water and electricity; separating and recycling waste.</i>	

<b>4. Does the <u>institution</u> or <u>main affiliated hospital trust</u> engage in professional education activities targeting individuals post graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare remain up to date during their professional career?</b>	
2	Yes, the <b>institution</b> or <b>main affiliated hospital trust</b> 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 <b>institution</b> or <b>main affiliated hospital trust</b> offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers
0	There are <b>no</b> such accessible courses for post-graduate providers
<p><i>The School of Public Health offers in-person and online <a href="#">postgraduate teaching</a> in the form of Diplomas (Occupational Health; Pesticide Risk Management) and Masters Programmes (Master of Public Health (MPH); Master of Philosophy in Occupational Health (MPhil Occ Health); Master of Medicine in Occupational Medicine (MMed Occ Med); Master of Medicine in Public Health Medicine (MMed PHM); Masters in Chemicals Risk Management (MCRM))</i></p> <p><i>Core courses of the <a href="#">Masters in Public Health (MPH) Environmental Health</a> track that include concepts of planetary health and sustainable healthcare, are offered as elective courses for other UCT postgraduate students (PPH 7097S Climate Change, Pollution and Health; PPH 7098F Environmental Health Policy; PPH 7099S Children's Environmental Health)</i></p> <p><i>A recent elective course (ANS5419FS The Meat Of The Matter - Food, Gender, And Planetary Health) examines how food and health (human, non-human and planetary) has been shaped by socio-political, economic, and environmental concerns.</i></p>	

<b>5. Does your <u>medical school</u> or its primary <u>affiliated hospital</u> have accessible educational materials for patients about environmental health exposures?</b>	
2	Yes, <b>all</b> affiliated hospitals have accessible educational materials for patients.
1	<b>Some</b> affiliated hospitals have accessible educational materials for patients.
0	<b>No</b> affiliated medical centers have accessible educational materials for patients.
<p><i>Student groups run programmes as part of the curriculum that emphasise prevention and promotion, with educational materials handed out to patients. The Students' Health and Welfare Centres Organisation (SHAWCO) does offer some health promotion resources and workshops related to environmental health risks e.g. TB</i></p>	

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

2	Yes, <b>all</b> affiliated hospitals have accessible educational materials for patients.
1	<b>Some</b> affiliated hospitals have accessible educational materials for patients.
0	<b>No</b> affiliated hospitals have accessible educational materials for patients.

*Educational materials for patients make no direct reference to climate change and its impacts on health.*

<b>Section Total (5 out of 14)</b>	<b>36%</b>
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**Acknowledgements:**

- Dr Jackie Stewart; Executive Director Students' Health and Welfare Centres Organisation (SHAWCO)
- Mr Christian Tereze – SHAWCO Student President
- Dr Christine Rogers – Deputy HoDiv, Division of Comm. Sciences & Disorders, DHRS
- Dr Jane le Roux – Senior Clinical Educator; Division of Comm. Sciences & Disorders, DHRS
- Ms Meghan Krenzer - Year 1 convener, Division of Occupational Therapy, DHRS
- Dr Shamila Manie – Programme Convenor; Division of Physiotherapy, DHRS
- Ms Sumaya Gabriels –Division of Disability Studies, DHRS

*Are there additional community engagement and advocacy resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.*

NONE

# 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 <u>medical school</u> or your <u>institution</u> offer support for medical students interested in enacting a sustainability initiative/QI project?	
2	Yes, the <b>medical school</b> or <b>institution</b> <i>either</i> offers grants for students to enact sustainability initiatives/QI projects <i>or</i> sustainability QI projects are part of the core curriculum.
1	The <b>medical school</b> or <b>institution</b> encourages sustainability QI projects (to fulfill clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, <b>but</b> there is no student funding available and there is no requirement to participate.
0	No, <b>neither</b> the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects.

*There is a final year MBChB elective option on sustainability quality improvement (SusQI) but uptake is minimal.*  
*In the Speech and Language Pathology programme, the course 'Seminars in Speech-Language Pathology and Audiology' does support student initiatives related to sustainability.*

2. Does your <u>institution</u> offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare?	
2	The <b>institution</b> has a <b>specific</b> 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 <b>require student initiative</b> to seek these out and carry them out in their spare time.
0	There are <b>no opportunities</b> for students to engage in planetary health/sustainable healthcare research.

*FHS undergraduate students can occasionally choose PH and SH research topics, but uptake is very low:*

- The MBChB third year programme offered a Special Study Module (SSM) in 2022 related to compiling this planetary health report card;*
- Speech and Language Pathology students may choose their own research topics, including topics related to PH and SH*

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

2	The <b>medical school</b> 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 <b>medical school</b> webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information.
0	There is <b>no medical-school</b> specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.
<p><i>No content on planetary health and/or sustainable healthcare is displayed on the FHS website. The School of Public Health has a webpage on <a href="#">Climate Change and Health</a>, with 4 sub-pages (Legislature and Policy; Organisations; Resources; Reports). These need to be updated and expanded and advertised to students.</i></p>	

**4. Does your medical 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 organization <b>with faculty support</b> at my medical school dedicated to planetary health or sustainability in healthcare.
1	Yes, there is a student organization at my medical school dedicated to planetary health or sustainability in healthcare but it <b>lacks faculty support</b> .
0	No, there is <b>not</b> a student organization at my institution dedicated to planetary health or sustainability in healthcare.
<p><i>The student society, Green Campus Initiative (GCI), has been mostly active on the main UCT campus but not at FHS campus over the past decade at least. In February 2023 GCI has been involved in FHS campus orientation for first years and in member recruitment.</i></p>	

**5. Is there a student liaison representing sustainability interests who serves on a medical 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 medical school or institutional decision-making council/committee.
0	No, there is no such student representative.
<p> </p>	

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)	
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 organize hiking, backpacking, kayaking, or other outings for students)
<p><i>There are outdoor activities offered by student societies on the main campus, like the UCT Mountain and Ski Club, and the UCT Diving Club. The FHS Wellness group has hosted a few hikes in the past year, but student attendance was low.</i></p>	

<b>Section Total (3 out of 15)</b>	<b>20%</b>
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**Acknowledgements:**

1. Mr Christian Tereze – SHAWCO Student President
3. Dr Christine Rogers – Deputy HoDiv, Division of Comm. Sciences & Disorders, DHRS
4. Dr Jane le Roux – Senior Clinical Educator; Division of Comm. Sciences & Disorders, DHRS
6. Dr Shamila Manie – Programme Convenor; Division of Physiotherapy, DHRS
7. Ms Sumaya Gabriels – Division of Disability Studies, DHRS

*Are there additional student-led initiative resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.*

NONE

# Campus Sustainability

***Section Overview:*** *This section evaluates the support and engagement in sustainability initiatives by the medical 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 medical 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 <u>medical school</u> and/or <u>institution</u> 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 <b>at least one designated staff member</b> for sustainability at the hospital and/or medical school.
2	There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but <b>no specific staff member</b> in charge of medical school and/or hospital sustainability.
1	There are <b>no salaried sustainability staff</b> , but there is a sustainability task force or committee
0	There are <b>no</b> staff members <b>or</b> task force responsible for overseeing campus sustainability
<p><i>There is only one full-time staff member in the UCT Office of Environmental Sustainability and another on contract. The full-time position of Director was created 4 years ago in the office of the Vice Chancellor.</i></p> <p><i>There is no specific staff member for the Faculty of Health Sciences, which is on a separate campus from the other faculties</i></p>	

2. How ambitious is your <u>institution/medical school</u> plan to reduce its own carbon footprint?	
5	The institution/medical school has a <b>written and approved plan</b> to achieve carbon neutrality by <b>2030</b>
3	The institution/medical school has a <b>written and approved plan</b> to achieve carbon neutrality by <b>2040</b>
1	The institution/medical school has a stated goal of carbon neutrality by <b>2040</b> but has <b>not created a plan</b> to reach that goal or the <b>plan is inadequate</b>
0	The institution/medical school does <b>not</b> meet any of the requirements listed above
<p><i>UCT's carbon neutrality goal is to achieve net zero by <b>2050 or sooner</b> to align with the Paris agreement, and with the plans and frameworks of the national government and City of Cape</i></p>	



Town. The plan on reaching carbon neutrality is not well defined however, and will be explored further over the next 4 years, as part of the [Khusela Ikamva \(“Secure the Future”\) Sustainable Campus Project](#). Currently, the goal is around 2-5% reductions every year, but it does not include the costs of the optimal pathway to this goal, nor to the detail around infrastructure and renewable energy purchase and other precise figures. (See [UCT Environmental Sustainability Strategy](#) (p 7) and the University’s [Vision 2030](#), developed 2021 for progressive reduction of UCT’s carbon footprint by 2050).

The goal of being ‘carbon neutral’ and ‘carbon net-zero’ by 2050 are used interchangeably in UCT’s [UN Global Compact Report document from February 2021](#). UCT has a clear plan for achieving this goal (pages 44 and 45 of this document). It is unclear to what extent the separate FHS campus and hospital are included in these plans, however.

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

3	Yes medical school buildings are <b>100%</b> powered by renewable energy
2	Medical school buildings source <b>&gt;80%</b> of energy needs from off-site and/or on-site renewable energy.
1	Medical school buildings source <b>&gt;20%</b> of energy needs from off-site and/or on-site renewable energy.
0	Medical school buildings source <b>&lt;20%</b> of energy needs from off-site and/or on-site renewable energy.

*Currently <20% utilize renewable energy, especially on the FHS campus. There is some rooftop solar PV on the new d-school and some upper campus buildings only. Currently there is a first phase of rollout to five non-FHS buildings with a total of 500 kW peak. Current feasible goals will be to make 20% of the campus powered on renewable energy, including the FHS campus.*

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

3	Yes, sustainable building practices are utilized for new buildings on the medical school campus and the <b>majority</b> of old buildings <b>have been retrofitted</b> to be more sustainable.
2	Sustainable building practices are utilized for new buildings on the medical school campus, but most old buildings have <b>not been retrofitted</b> .
1	Sustainable building practices are <b>inadequately or incompletely</b> implemented for new buildings.
0	Sustainability is <b>not considered</b> in the construction of new buildings.

*UCT uses the Green Star Standard which was a 2012 Council decision that all new buildings should be at least four-star Green Star rated. The Green Star Rating is an independently managed standard by the Green Building Council of South Africa, in line with international best practice. Despite the decision, some new buildings, including one on FHS, were built without targeting a Green Star rating. The new Animal Unit on FHS aims to achieve a minimum 4-Star Green Star rating.*

*The challenge lies where there is not enough capital to retrofit old buildings, and where renovation restrictions on old buildings (80% of the FHS campus) due to heritage regulations apply.*

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

2	Yes, the medical school has implemented strategies to encourage and provide <b>environmentally-friendly transportation options</b> such as safe active transport, public transport, or carpooling and these options are well-utilized by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default.
1	The medical school has implemented <b>some</b> strategies to provide environmentally-friendly transportation options, but the options are <b>unsatisfactorily</b> accessible or advertised.
0	The medical school has <b>not</b> implemented strategies to encourage and provide environmentally-friendly transportation options.

*UCT offers an extensive diesel shuttle bus service between campuses, residences and to stops near to off-campus student housing. The Vision 2030 plan states the intention to replace diesel with electric buses and a feasibility study is underway. A few years ago, the exhaust system was changed to lower the diesel emissions according to the European standard.*

*Another aspect is making the campuses more accessible on foot or by bicycle. There are bicycle stands on all campuses, however safety and infrastructure like dedicated cycle lanes need attention.*

*The UCT shuttle is well utilised by some staff and students only; many students prefer their own cars or carpools for convenience.*

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

2	Yes, the medical school has <b>both</b> compost <b>and</b> recycling programs accessible to students and faculty.
1	The medical school has <b>either</b> recycling <b>or</b> compost programs accessible to students and faculty, but not both.
0	There is <b>no</b> compost or recycling program at the medical school.

*There is a bio-composter on the main UCT campus, where all clippings and trimmings from all campuses (including FHS) are transported, for processing into mulch (closed-loop system). There is food composting in student residences, but not by the outsourced food retailers on campus.*

*There is a campus-wide recycling programme with waste and recycling separation bins accessible to students and staff on all campuses, but with a low success rate since inception. Waste is sorted by a waste contractor at an offsite sorting facility as the least complicated solution.*

*There is a fresh drive for promoting recycling, with new well-branded and colour-coded bins, and stronger encouragement of students and staff to use them correctly. The cleaning supervisors and garden supervisors have been trained in the new recycling programme, and cleaning and garden staff will be trained later.*

7. Does the <u>medical school</u> 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 medical school has <b>adequate</b> sustainability requirements for food and beverages, including meat-free days or no red-meat, and <b>is engaged</b> in efforts to increase food and beverage sustainability.
2	There are sustainability guidelines for food and beverages, but they are <b>insufficient or optional</b> . The medical school <b>is engaged</b> in efforts to increase food and beverage sustainability.
1	There are sustainability guidelines for food and beverages, but they are <b>insufficient or optional</b> . The medical school is <b>not</b> engaged in efforts to increase food and beverage sustainability.
0	There are <b>no</b> sustainability guidelines for food and beverages.
<i>There are campus guidelines or policy on procurement of food and beverages, but they are not followed.</i>	

8. Does the <u>medical school</u> or <u>institution</u> apply sustainability criteria when making decisions about supply procurement?	
3	Yes, the medical school has <b>adequate</b> sustainability requirements for supply procurement <b>and is engaged</b> in efforts to increase sustainability of procurement.
2	There are sustainability guidelines for supply procurement, but they are <b>insufficient or optional</b> . The medical school is <b>engaged</b> in efforts to increase sustainability of procurement.
1	There are sustainability guidelines for supply procurement, but they are <b>insufficient or optional</b> . The medical school is <b>not engaged</b> in efforts to increase sustainability of procurement.
0	There are <b>no</b> sustainability guidelines for supply procurement.
<i>There are campus-wide guidelines on procurement sustainability, but it has not had the intended impact because there are typically no standard operating procedures in place to achieve the policy. There are no FHS-specific guidelines, as FHS procurement is under the responsibility of UCT Properties and Services for campus-wide procurement decisions.</i>	

9. Are there sustainability requirements or guidelines for events hosted at the <u>medical school</u> ?	
2	Every event hosted at the medical school <b>must</b> abide by sustainability criteria.
1	The medical school <b>strongly recommends or incentivizes</b> sustainability measures, but they are <b>not required</b> .
0	There are <b>no</b> sustainability guidelines for medical school events.
<i>There are no guidelines for sustainability for events affiliated with UCT, nor are there FHS-specific sustainability criteria for events.</i>	

10. Does your <u>medical school</u> have programs and initiatives to assist with making lab spaces more environmentally sustainable?	
2	Yes, the medical school has <b>programs</b> and <b>initiatives</b> to assist with making lab spaces more environmentally sustainable.
1	There are <b>guidelines</b> on how to make lab spaces more environmentally sustainable, but not programs or initiatives.
0	There are <b>no</b> efforts at the medical school to make lab spaces more sustainable.
<p><i>The FHS Operations and Services division has several sustainability-focused action points for lab spaces and related activities, including:</i></p> <ul style="list-style-type: none"> <li>- <i>Composting of (uninfected) animal matter on UCT grounds,</i></li> <li>- <i>Discouraging the use of liquefied petroleum gas (for open flames), due to safety and toxic gas emission concerns.</i></li> </ul> <p><i>Should a lab be refurbished, then energy efficiency would be integrated. However, operational labs do not have specific guidelines for sustainable operations.</i></p>	

11. Does your <u>institution's</u> endowment portfolio investments include fossil-fuel companies?	
4	The institution is <b>entirely divested</b> from fossil fuels <b>and</b> has made a <b>commitment to reinvest divested funds</b> into renewable energy companies or renewable energy campus initiatives.
3	The institution is <b>entirely divested</b> from fossil fuels.
2	The institution has <b>partially divested</b> from fossil fuel companies <b>or</b> has made a <b>commitment to fully divest</b> , but <b>currently</b> still has fossil fuel investments.
1	The institution has <b>not divested</b> from fossil-fuel companies, but faculty and/or students are <b>conducting organized advocacy</b> for divestment.
0	Yes, the institution has investments with fossil-fuel companies and there have been <b>no efforts</b> to change that.
<p><i>The university council has made the decision to fully divest from fossil fuels by 2030. As of mid-2020, fossil fuel exposure accounted for approximately 2.5% of the endowment's total assets, and approximately 5% of its domestic equity exposure. Investments in renewable energy account for approximately 1.8% of the endowment's total assets.</i></p>	

<b>Section Total (13 out of 32)</b>	<b>41%</b>
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#### Acknowledgements:

- Mr Manfred Braune: Director of Environmental Sustainability, UCT Office of the Vice Chancellor
- Ms Nzwakie Gxumisa: Occupational Health and Safety Manager, FHS Operations: Health and Safety
- Ms Noelene le Cordier: Senior Horticulturist, Grounds and Gardens, UCT

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

*A sustainable water management strategy has been developed and is being implemented across campuses e.g. residence water saving measures; embankments and terraces to slow water runoffs; improved water drainage systems; more water-efficient irrigation systems. However there is no objective measurement of water use with regular feedback on particularly water-costly activities*

*An integrated landscape plan addresses **campus biodiversity** and is being well implemented to improve the ecology of the natural surroundings, and the resilience of the soils. The amount of vegetation has increased, and alien species are replaced by indigenous water-wise ones. Students are encouraged to participate in biodiversity-related projects, with some success, but sustaining student projects is a challenge*

*UCT does have a **plan for healthy environments, indoor and outdoor**. With the COVID response, the ventilation of many venues was converted to fresh air entirely or air filters. Newer buildings are built with plenty of natural light, external views, and good ventilation. The FHS maintains outdoor spaces with natural vegetation and seating for students and staff.*

*A short orientation course on sustainability for students in residences was piloted in 2022 and is being developed further in 2023, with the intention of ultimately creating a campus-wide foundational 'literacy' course on environmental sustainability.*

# 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 University of Cape Town (UCT) Faculty of Health Sciences.

The following table presents the individual section grades and overall institutional grade for the UCT Faculty of Health Sciences on this medical-school-specific Planetary Health Report Card.

Section	Raw Score %	Letter Grade
<b>Planetary Health Curriculum (30%)</b>	$(39/72) \times 100 = 54.17\%$	C
<b>Interdisciplinary Research (17.5%)</b>	$(9/17) \times 100 = 52.94\%$	C
<b>Community Outreach and Advocacy (17.5%)</b>	$(5/14) \times 100 = 35.71\%$	D+
<b>Support for Student-led Planetary Health Initiatives (17.5%)</b>	$(3/15) \times 100 = 20.00\%$	D-
<b>Campus Sustainability (17.5%)</b>	$(13/32) \times 100 = 40.63\%$	C-
<b>Institutional Grade</b>	$(A \times 0.3 + B \times 0.175 + C \times 0.175 + D \times 0.175 + E \times 0.175) = 43.25\%$	C