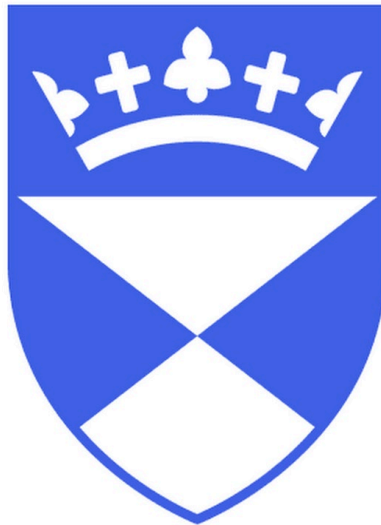




Planetary Health Report Card (Medicine): *University of Dundee*



2023-2024 Contributing Team:

- Students: Anna Antas*, Cara Malcolm, Mia Shanks, Ella Weir, Beatrice Rae, Hannah Berry, Amy Clark-Want, Caitlin Caldwell, Lidya Elena Ucer, Joshlen Addai-Pepurah, Attie Black, Olga Walusiak, Raina Biswas
- Faculty Mentors: Jill Belch, Andrew Murphy, Deborah O'Farrell, Eider Gomez Abio, Laura Burgess, Lesley Mitchell, Marney Keiller, Richard Scrivener, Rodney Mountain, Timothy Smith, Trudy Cunningham, Valerie Godfrey, Vicki Tully, Gwen Kennedy, Amy Rogers, Kristina Pilvinyte
- *Primary Contact: Anna Antas, 2405310@dundee.ac.uk

Summary of Findings

Overall	B+
<u>Curriculum</u>	B
<ul style="list-style-type: none"> The University of Dundee School of Medicine (UoD SoM) includes planetary health in its MBChB curriculum. Teaching is delivered via lectures, workshops, and SSCs throughout the programme. Recommendations: There is currently no teaching on patient consultations regarding climate change effects on human health. Include teaching students about strategies for carrying out consultations on environmental and exposure histories in the curriculum. Introduce this during clinical/ communication skills or integrated teacher sessions. More effort could be put into introducing the impacts of climate change on marginalised populations outside electively chosen SSCs and include them within core curriculum. 	
<u>Interdisciplinary Research</u>	A
<ul style="list-style-type: none"> UoD SoM conducts plenty of planetary health related research, has a new sustainability website and hosts planetary health events, educating staff, students and visitors about planetary health. Recommendations: UoD SoM should endeavour to join an international planetary health or ESH organisation. In addition, UoD SoM should further its efforts to include community members impacted by climate and environmental injustice to have decision making powers about the research conducted there. 	
<u>Community Outreach and Advocacy</u>	B+
<ul style="list-style-type: none"> UoD SoM partners extensively with community organisations to promote planetary and environmental health. Ninewells also offers professional education on planetary health for its postgraduates to ensure their knowledge regarding such topics is up to date. Recommendations: One area for improvements could be increasing the frequency of communications regarding SoM sustainability to its students. Secondly, accessible educational materials for patients on health impacts of climate change and environmental health exposures should be created and made available within all SoM affiliated teaching hospitals. Perhaps this could be done by students as part of their SSCs. 	
<u>Support for Student-Led Initiatives</u>	B
<ul style="list-style-type: none"> The University and the School of Medicine offer co-curricular opportunities specifically targeting students: projects, panels, events, volunteering and wilderness/outdoors programs. The Sustainability Committee has a student representative within it. The SoM's sustainability website offers information on sustainability objectives, activities and contact information of potential mentors. Recommendations: There is not a student organisation dedicated specifically to planetary health and sustainability in healthcare. The Sustainability Committee should support students in the creation, registration and operations of a student-led group or society focussing specifically on planetary health. 	
<u>Campus Sustainability</u>	B
<ul style="list-style-type: none"> Numerous refurbishments have been conducted at UoD SoM since 2020 following the sustainable construction guide (requiring the buildings to be carbon net zero). 'Green' travel options to campus exist, and are incentivised by the University. UoD and SoM have environmental and sustainability policies on supply procurement. Schemes within the Medical School increasing the sustainability of lab spaces exist. Recommendations: Explore 'green' travel options and incentives for teaching outside of campus-based clinical sites. Lobby NHS Tayside to increase the proportion of renewable energy used within it. Ensure that the Sustainable Events policy is made mandatory for all events hosted by the School of Medicine. 	

Statement of Purpose

Planetary health is human health.

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

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

With the purpose of increasing planetary health awareness and accountability among 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 centred on environmental health impacts 5) medical school campus sustainability.

Definitions & Other Considerations

Definitions:

- **Planetary Health:** is described by the Planetary Health Alliance as “the health of human civilisation and the state of the natural systems on which it depends.” For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional ‘environmental health’ examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of medical school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term “planetary health” to satisfy the metric.
- **Sustainable Healthcare:** As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.
- **Education for Sustainable Healthcare (ESH):** is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
 1. Describe how the environment and human health interact at different levels.
 2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
 3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- **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 mould after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution.
- **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 in 2022, 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

1.1. 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 more than one elective whose primary focus is ESH/planetary health in the past year.
2	Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year.
1	The medical 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 medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.
<p><i>Score explanation: At Dundee Medical School, students take on Student Selected Components which are short elective projects differing between each student. Year 1 students take part in a longitudinal SSC whereby they study throughout the year and make a submission, usually literature review at the end of the year. In Year 1, students can choose a Planetary Health SSC where they study a specific sustainable healthcare topic in depth. Students can also choose a Global Health SSC where they can choose to undertake planetary health research in a global context. In Years 2 and 3, SSCs last 4 weeks - Year 2 students have 1 block, Year 3 students have 2 blocks. These students can undertake : Our Natural Health Service SSC to study health and the environment in conjunction. Other options include Healthcare Improvement, Global Health and Public Health SSCs where students can explore sustainability challenges in the community and strategies to tackle these. Students can also self-propose in an area of their own interest. In Year 5/ScotGEM4, the option of Introduction to Sustainable healthcare is available.</i></p>	

Curriculum: Health Effects of Climate Change

1.2. Does your <u>medical school</u> 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><i>Score explanation: These topics are covered formally in the Climate Change and Health workshop in Year 2. This is an interactive session which breaks down climate science, how climate affects health, how healthcare affects the environment and climate mitigation. Students have the opportunity to share their own thoughts before learning about risks posed by extreme heat, e.g. increases in cardiovascular, cerebrovascular and respiratory mortality.</i></p>	

1.3. Does your <u>medical school</u> 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><i>Score explanation: These topics are covered formally in the Climate Change and Health workshop This is an interactive session which breaks down climate science, how climate affects health, how healthcare affects environment and climate mitigation. Students have the opportunity to share their own thoughts before learning about the impact of severe weather such as floods and the impact it has on the mental health of those affected by severe flooding, as well as service disruption, poor water quality and infectious disease spread.</i></p>	

1.4. Does your <u>medical school</u> 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><i>Score explanation: This is briefly covered in the Climate Change and Health workshop in Year 2. There are 3 slides detailing which infectious diseases are affected by temperature and climate changes and some more detail on both dengue and malaria, describing geographical shifts of endemic areas.</i></p>	

1.5. Does your <u>medical school</u> 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.
<p><i>Score explanation: At the University of Dundee School of Medicine respiratory effects of climate change are mentioned in the year 1 broadening horizons lecture. This covers the effects through both increasing allergen levels and increasing pollution on the respiratory system, particularly asthma.</i></p>	

1.6. Does your <u>medical school</u> 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.
<p><i>Score explanation: The University of Dundee School of Medicine mentions heat related illness and cardiovascular failure due to extreme heat in the year 1 broadening horizons lecture during the foundations of medicine block. Cardiovascular health in relation to climate change is also briefly mentioned in the year 2 Climate Change and Health workshop. However, neither of these discuss the topic in depth.</i></p>	

1.7. Does your <u>medical school</u> curriculum address the mental health and neuropsychological effects of environmental degradation 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><i>Score explanation: At the University of Dundee School of Medicine the effects on mental health through climate change is mentioned in the Climate Change and Health workshop in year 2, within this solastalgia is also mentioned. Time in nature and improved mental health was also mentioned when highlighting the importance of protecting the climate. These topics, however, were not covered in great depth.</i></p>	

1.8. Does your <u>medical school</u> 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.
<p><i>Score explanation: The University of Dundee School of Medicine has a year 1 broadening horizons lecture, which covers the effects climate change has on health due to changing ecosystems, loss of biodiversity and increasing pollution. Biodiversity in particular is mentioned for its need as a medicine resource and as a regulator to infectious diseases such as malaria. This lecture also includes a padlet page for students to interact and engage on these topics in further depth. Planetary health is reiterated in years 2 and 3 as well, through workshops and small group teaching.</i></p>	

<p>1.9. Does your <u>medical school</u> curriculum address the outsized impact of climate change on marginalised populations such as those with low SES, women, communities of color, Indigenous communities, children, homeless populations, and older adults?</p>	
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><i>Score explanation: At the University of Dundee Medical School, the Undergraduate curriculum covered the impact of climate change on human health, such as malnutrition, climate migration, changes in vector ecology and heat related illness and deaths, but did not specifically cover the impact on marginalised populations in Year 1 or 2 Lectures. The impact of environmental degradation on indigenous communities was an optional topic in the Y1 planetary health SSC.</i></p>	

<p>1.10. Does your <u>medical school</u> curriculum address the unequal regional health impacts of climate change globally?</p>	
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><i>Score explanation: The University of Dundee Medical School briefly covers the unequal regional health impacts of climate change globally in the Broadening Horizons Year 1 Lecture, and in the Year 2 Climate Change and Health Lecture, where it looks at fuel poverty, food and air pollution in particular.</i></p>	

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

1.11. 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 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.

Score explanation: At the University of Dundee School of Medicine, the lecture titled “Air Pollution: Climate Crisis and Health” extensively looks at the impact of air pollution on reproductive health, in particular looking at preterm birth, infant mortality, preeclampsia, and the effects on sperm count.

1.12. 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 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.

Score explanation: At the University of Dundee School of Medicine, human caused environmental threats that are mentioned include ramifications from severe weather (injury/death), heat related illness and death, cardiovascular failure, malnutrition and civil conflict, water quality impacts, increasing allergens and asthma issues, changes in vector ecology e.g. malaria and dengue fever and water quality impacts during the Year 1 Broadening Horizons lecture and Year 2 Climate Change and Human Health lecture.

1.13. To what extent does your medical school emphasise 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 medical 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.

Score explanation: The medical school does not platform or emphasise Indigenous voices in terms of environmental issues and climate change within the planetary health curriculum. I could find no evidence of this specifically in Global Health or Global Citizenship teaching available.

1.14. Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins on marginalised populations such as those with low SES, women, communities of colour, 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.

Score explanation: This is mentioned briefly in the year 2 Climate Change and Health workshop when looking at the environmental burden of countries and how those with the smallest impact are suffering the greatest. However this was not expanded in depth to cover the communities in particular who are facing the adverse effects of climate change.

Curriculum: Sustainability

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

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.

Score explanation: The University of Dundee Medical School covers the environmental and health co-benefits of a plant based diet during the Sustainable Nutrition Year 1 Lecture and the Climate Change and Health Year 2 Lecture. The Sustainable Nutrition Lecture explores how the current foods we eat/ diets we follow are not providing us with a nutritional and healthy diet, and how modifying it can produce better health outcomes for people and the environment, as well as the concept of a sustainable diet. Healthy and sustainable lifestyles are also promoted in the Year 2 and 3 Natural Health Service SSC.

1.16. Does your medical 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.

Score explanation: At the University of Dundee School of Medicine, the carbon footprint of healthcare systems is explored throughout all 5 years. In Year 1 carbon footprint is covered in an introduction to planetary health session. In Year 2 a climate change workshop covers this issue. In years 4 & 5 this

includes a sustainable healthcare online module, which specifically covers carbon footprint, and low carbon alternatives.

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

2	The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment
2	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 fulfil 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. This is commonly known as social prescribing in the UK.
1	Environmental impact of surgical healthcare on planetary health and the climate crisis, and how can it be mitigated
1	The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anaesthesia's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions
1	The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers.
1	Waste production within healthcare clinics and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting)
<p><i>Score explanation: The year two climate change workshop covers the four principles of sustainable clinical practice. This is covered in greater detail in the year 4 sustainable healthcare online module. There are optional SSCs in which this is covered in more detail; Natural Health Service and Sustainable Healthcare. The Year 3 Sustainability in Primary Care workshop covers inhalers, pharmaceutical pollution, social prescribing and realistic medicine. The Environmental Sustainability in Healthcare module available to our final year students covers a wide range of sustainability issues, including anaesthetic gases, inhalers, waste production and surgical healthcare in the climate crisis.</i></p>	

Curriculum: Clinical Applications

1.18. In training for patient encounters, does your medical school's curriculum introduce strategies to have conversations with 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
<i>Score explanation: The year 3 Sustainability in Practice workshop covers identifying carbon hotspots in primary care and strategies for taking action, but whilst it covers how to implement this with staff it does not quite cover broaching the subject with patients.</i>	

1.19. In training for patient encounters, does your <u>medical school's</u> 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.
<i>Score explanation: While in each teaching block there is information about occupational and environmental exposures, there is no specific teaching regarding strategies for taking an environmental history.</i>	

Curriculum: Administrative Support for Planetary Health

1.20. Is your <u>medical school</u> currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?	
4	Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education.
2	Yes, the medical 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.
<i>Score explanation: The University has been running planetary health, sustainable healthcare and climate change related SSCs since 2018, but has made significant improvements in non-elective planetary health curriculum. The lead for Healthcare Sustainability has been adding ESH content to the curriculum since 2020.</i>	

1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> curriculum?	
6	Planetary health/ESH topics are well integrated into the core medical school curriculum.
4	Some 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 (a) standalone lecture(s) .

0	There is minimal/no education for sustainable healthcare.
<p><i>Score explanation: Within the University of Dundee MBChB programme's core curriculum there are numerous sessions spread across the whole 5 year degree. This includes in Year 1: an introduction to planetary health and a sustainable nutrition session. In Year 2 this includes a climate change workshop. In Year 3 this includes a sustainability in primary care session and in final years this includes a sustainable healthcare online module. The current ESH lead is looking at improving this with more staff development, project work and more topics. The ESH leads' doctoral research is also looking at additional ways to embed ESH into the undergraduate curricula, in a way to maximise impact. Many lectures covering different subject areas also touch on sustainability and planetary health.</i></p>	

1.22. 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?	
1	Yes, the medical school has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare
0	No, the medical school does not have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare.
<p><i>Dr Tim Smith has been the Lead for Healthcare Sustainability Teaching at the School of Medicine within the University of Dundee since 2020.</i></p>	

Section Total (50 out of 72)	69.44%
-------------------------------------	---------------

Back to Summary Page [here](#)

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.

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 emphasised.*

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your <u>medical school</u>?	
3	Yes, there are faculty members at the medical school who have a primary research focus in planetary health or healthcare sustainability.
2	Yes, there are individual faculty members at the medical school 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 medical school.
0	No, there are no planetary health and/or healthcare sustainability researchers at the institution or medical school at this time.

Score explanation: Tim Smith is a faculty member at the University of Dundee School of Medicine, currently undertaking a doctoral degree in Planetary Health and Medical Education. His research is focused on transformational approaches to embedding planetary health and sustainable healthcare topics into undergraduate medical curricula, with specific focus on transformational learning, design thinking and student centred learning.

There is also a [significant number of research](#) being carried out at the University [related to the UN Sustainability goals](#).

Examples of research titles covering sustainable development goals can be found in [this document](#). The breakdown of how many titles cover each of the sustainable development goals are seen [here](#).

2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your <u>institution</u>?	
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.

Score explanation:

The University has the Environment Task Group, which was set up to develop a strategy and action plan to improve its environmental performance. The University has released an Environmental and Sustainability Policy Statement and Sustainable Development Goals in line with the UN Sustainable Development Goals. Moreover, the School of Medicine has a dedicated Sustainability Committee, working towards achieving the targets set up in the Planetary Health Report Card.

2.3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your medical 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.

Score explanation: There is currently no processes for affected communities to hold decision-making powers or give advice. The School of Medicine does, however, have a Community Engagement Team and the University is involved in local sustainability projects (mainly the Eden Project). The medical school also has collaborated with the V&A Dundee on their Plastics exhibition, the Botanic gardens on their Wee Forests project, RSPB connecting people to nature, Dundee cycling hub on improving women's cycling around Dundee, Ninewells Community garden on several seed to fork work sharing healthy recipe/food bags with local community larders and projects on improving active travel for students from home to Medical school. 'Lay' persons (who may or may not be from communities disproportionately affected by climate change and environmental injustice) are also an integral part on Clinical Trial Steering committees at the School of Medicine, and during the process of writing Guidelines ([AGREE II- Appraisal of Guidelines for Research & Evaluation II](#)) where they advise on research agendas within the School of Medicine.

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

3	There is an easy-to-use, adequately comprehensive website that centralises various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities.
2	There is a website that attempts to centralise various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive.
1	The institution has an Office of Sustainability website that includes some resources related to health and the environment.
0	There is no website.

Score explanation: The [website](#) provides information on committee and supporting staff involved in sustainability within the medical school,, the Planetary Health Report Card, and ongoing strategies and activities relating to sustainability. The sustainability strategy page within the website outlines prioritising research on the topics of environmental health, health effects of climate change and climate solutions.

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

4	Yes, the medical 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.

Score explanation: The medical school hosted a Grand Round on Sustainability in 2024. They also delivered the Scottish Heart and Arterial Disease Prevention meeting on ‘ The Impact of Environmental Pollution on Cardiovascular Disease’ in November 2023. Moreover, the medical school introduced a Sustainability Week (November 2023) covering a number of topics.

2.6. Is your medical school a member of a national or international planetary health or ESH organisation?

1	Yes, the medical school is a member of a national or international planetary health or ESH organisation
0	No, the medical school is not a member of such an organisation

Score explanation: The University of Dundee School of Medicine is a member of the International Medical Education Collaboration on Climate and Sustainability (IMECCS) through the UK membership led by the University of Southampton.

Section Total (15 out of 17)

88.24%

Back to Summary Page [here](#)

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

Community Outreach and Advocacy

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

3.1. Does your <u>medical school</u> partner with community organisations to promote planetary and environmental health?	
3	Yes, the medical school meaningfully partners with multiple community organisations to promote planetary and environmental health.
2	Yes, the medical school meaningfully partners with one community organisation to promote planetary and environmental health.
1	The institution partners with community organisations, but the medical school is not part of that partnership.
0	No, there is no such meaningful community partnership.

Score explanation: The medical school has multiple partnerships aiming to promote environmental and planetary health, hence we have awarded a score of 3.

The medical school partners with a number of different community organisations to promote planetary and environmental health which are detailed below:

- *Participation in [Sustainable Dundee](#) which is a partnership of organisations working together to tackle the Climate Emergency by supporting low carbon living and enhancing nature to help the city achieve its target of Net Zero Greenhouse Gas emissions before 2045.*
- *Lectures on areas at conferences, Societies, Government Bodies, Royal College (examples [1,2,3,4](#))*
- *NHS Tayside:*
 - *Many [staff employed by UoD contributing to health and wellbeing via commitments with NHS Tayside](#)*
 - *[NHS Tayside & UoD TASC](#)– combined clinical research Governance & Management for clinical trials to improve health and well being*
 - *[NHS Tayside & UoD – Combined Clinical Trials Unit](#) to improve health and wellbeing. TCTU was set up as a collaboration between the University of Dundee and NHS Tayside to manage the running of all clinical trials in Tayside*
- *NHS Tayside & UoD - The jointly run [Clinical Research Centre](#) is a state-of-the-art research facility providing space, equipment and staff to support our researchers of all clinical professions and our industry partners in delivering high quality clinical research in Tayside.*
- *NHS Tayside & UoD– [working together on waste, recycling, energy.](#)*
- *NHS Tayside & UoD - [Tayside Repository](#): A secure bio-repository that collects NHS samples of surplus tissue and other specimens donated by consenting patients who*

have undergone surgery or other medical procedure during the course of their investigations and treatment.

- NHS Tayside & UoD - work jointly together to [train medical students](#) who will improve health and wellbeing outcomes.
- NHS Tayside [STAR Awards 2023 Winners](#): Innovation and Improvement - sponsored by University of Dundee, School of Medicine
- Dundee University and NHS Tayside [Grand Rounds](#)
- [CAFS2](#) (Clean Air for Scotland 2) Scottish Government workshops
- Royal College of Physicians, Edinburgh. University of Dundee School of Medicine Sustainability Committee's rep co-chairs [RCPE air pollution working group](#)
- Engagement with the [Climate Café of RCPE](#). [COP26 Legacy meeting](#)
- [Eden Project](#)
 - Has planted wildflower meadow on hospital site, near to the medical school library
- [Ninewells Garden](#). (Vicki Tully, a member of UoD SoM Sustainability Committee is a trustee for Ninewells community garden)
 - Plant and garden for improved wellbeing of staff and visitors as volunteers
 - Offer weekly volunteering sessions for students to help with garden and for them to learn about gardening
 - Also involved in 2nd and 3rd year SSC projects for medical students. SSC projects aim to explore issues surrounding healthy eating and food poverty as well as educating students about seed to fork programmes, which are linked in with local community leaders. SSC students are tasked with creating soup bags for local larders as well as teaching people to grow their own produce.
- The [Wee Forest initiative](#)
 - Led by the Scottish government and assisted by the University of Dundee, the project aims to grow green spaces, roughly the size of a tennis court, in urban areas to encourage biodiversity and to raise awareness about climate change and the value of urban trees.
 - The green spaces will be looked after by local young people to teach them about nature and climate change
 - Currently 2 'Wee Forests' in Dundee - located on Robertson Street and Douglas Community Centre
- [Dundee Living Library](#) – Medicine involved.
- [SHARE](#) – A volunteer blood sample donation project run throughout Scotland by UoD, now adopted by NHS Research, Scotland. It has been created to establish a register of people, aged 11 and over, interested in participating in health research.
- [Masks for Scotland](#)

3.2. Does your medical school offer community-facing courses or events regarding planetary health?

3	The medical school offers community-facing courses or events at least once every year.
2	The medical 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 medical school was not involved in planning those courses or events.
0	The institution/medical school have not offered such community-facing courses or events.

Score explanation: The medical school has been involved in a number of community events, and the faculty host regular events themselves.

The UoD organises Saturday lectures, of which 4 within the last year were organised by the SoM staff. Moreover, SoM staff have organised and carried out a series of 7 sustainability lectures to the community in the last year, for example Climate Cafes, XR Dundee, Climate Conversations (Blairgowrie).

Additionally, the medical school has some links to community led events regarding planetary health, like one event which was led by the Emergency and Critical Care Society, teaching a young Beaver group about first aid.

Details of some more of the links the medical school has to community led events are detailed below:

- *Some community events staff from Medical School have participated in, involving topics such as air Pollution, health & the climate. Mixture of lectures, meetings and workshops (Scottish Government Crisis Party Lung Group, Scottish Government Air Quality, Scottish Net Zero Committee, Royal Environmental Health Institute, Royal Society, Edinburgh, Blairgowrie Climate Conversation) Examples [1](#),[2](#),[3](#),[4](#),[5](#),[6](#),[7](#),[8](#).*
- *Participation in [RCPE Climate Change Interviews](#) for web page.*
- *Collaborate with a range of organisations on improvement/design projects – Community gardens, Eden project, Botanic gardens, RSPB, Green health partnership, V & A*
- *Delivery of [Active Strength Project](#), engaging overweight/inactive children in the local community through participation in resistance training (Dundee University, not specifically the medical school)*
- *[Healthiest Town](#) is an organisation co-founded by Dr Callum Leese a few years ago with some colleagues in Aberfeldy. It's a community-led initiative aiming to improve health and wellbeing in the local area and we now have 3 employees*
- *Newspaper articles medical school has participated in writing/assisted. Examples [1](#),[2](#),[3](#),[4](#),[5](#),[6](#).*

3.3. Does your medical 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 receive communications about planetary health or sustainable healthcare.

Score explanation: The medical school has information available for students to read at their own leisure but as direct communication to students about planetary health (via the newsletter) has been suspended a score of 1 has been awarded.

- *[SharePoint](#) with information relating to planetary health which is available for students*
- *[Webpage](#) which posts sustainability news*
- *Sustainability Corridor with Large Screens: Regular 'climate health' messages are displayed in the Concourse large screen within the medical school*
- *Sustainability Newsletter: The newsletter is only being sent to staff currently, it isn't being sent to students (this was raised during the plant sale)*

3.4. Does the institution or main affiliated hospital trust engage in professional education activities targeting individuals post graduation with the aim of ensuring their knowledge and

skills in planetary health and sustainable healthcare remain up to date during their professional career?	
2	Yes, the institution or main affiliated hospital trust offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health.
1	Yes, the institution or main 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><i>Score explanation: The University and Ninewells hospital engage with keeping postgraduate knowledge up to date on climate change by putting on lectures, circulating news and offering post graduate courses, hence a score of 2 has been awarded. See details below:</i></p> <ul style="list-style-type: none"> ● <i>University of Dundee medical school had the inaugural Sustainability Week 27th -29th Nov 2023 which had stands on air pollution, biodiversity, plants and information on activities in the medical school and life sciences open to all PG staff</i> ● <i>Sustainability Training Day with OPD Q1 2024</i> ● <i>Many lectures (examples 1,2,3) given by staff at Congresses to improve wellbeing and health</i> ● <i>There are a significant number of PG courses for postgraduates and other staff on planetary health. These include 3 Thursday lunchtime meetings on aspects of climate change in the year in question, 32 on health issues and 1 on gender issues. ‘Sustainability and climate change mitigation are included in the ongoing regular schedule of ‘thursday grand rounds’ educational sessions</i> ● <i>Saturday night lectures held during term time, by the University of Dundee include 6 which could be considered relevant in the past year</i> ● <i>NHS Tayside regularly advises its staff on reducing energy consumption, for example through Vital Signs (communications to all staff members) numbers 1410 and 1579. 66% of NHS staff are postgraduates</i> ● <i>News about climate change research at University of Dundee available on UoD website</i> ● <i>University of Dundee offers postgraduate MSCs and PHDs in climate change and sustainability</i> ● <i>Moreover, staff have been and will be participating in volunteering activities as detailed below:</i> <ul style="list-style-type: none"> ○ <i>Togs: (all sessions Thursdays 9.30-12.30pm) - 18 Jan 2024 (full) - 15 Feb 2024</i> ○ <i>Ninewells Community Garden (all sessions Wednesdays 10am-3pm) - 10 Jan 2024 - 14 Feb - 13 Mar - 17 Apr 2024</i> ○ <i>Dundee International Women’s Centre: (all sessions Thursdays 9am-1pm) - 25 Jan - 22 Feb - 21 Mar - 25 Apr 2024</i> 	

3.5. Does your medical school or its affiliated teaching hospitals have accessible educational materials for patients about environmental health exposures?	
2	Yes, the medical school or all affiliated hospitals have accessible educational materials for patients.
1	Some affiliated hospitals have accessible educational materials for patients.
0	No affiliated medical centres have accessible educational materials for patients.

Score explanation: The University of Dundee School of Medicine designed and disseminated multiple types of educational materials across certain clinics within both Ninewells hospital, as well as broader NHS Tayside.

In Ninewells hospital, which is the main teaching hospital affiliated with the medical school, there are some accessible materials for patients regarding environmental health exposures. There are some leaflets/banners with information on air pollution and the risks it poses to health. These leaflets also suggest ways patients can minimise air pollution, for example not leaving car engines running when idling or burning wood for fires. These leaflets are available at the information booth at the hospital entrance, and have been available for weeks at a time in different adult outpatient clinics. They are due to be displayed in paediatrics.

Every adult and maternity clinic has information booklets about risks of smoking /passive smoking as well as smoking cessation advice.

Some oncology clinics and food banks display leaflets from the School of Medicine Public Health department.

Regarding materials available within [broader NHS Tayside](#):

“There are a number of additional public health initiatives ongoing with NHS Tayside. These include work on smoking cessation (in users of food banks, and patients with lung and head and neck cancers); improving sexual health (such as the Bridge-It study on provision of progesterone only pill for women presenting to community pharmacies for emergency contraception); and work on substance use and drug deaths.”

NearMe is a virtual communication platform used for consultations between doctors and patients. All patients joining this get education on health issues of transport emissions and what is being achieved by less transport emissions.

NHS Tayside is part of the Dundee Green Health Partnership. Dundee’s green health prescription is a new pathway to make the most out of Dundee’s nature based activities in greenspaces as a health promoting resource. Patients receive information on benefits of greenspace. The Green Health Prescription can work as an alternative or complement to traditional medicine

3.6. Does your medical school or its affiliated teaching hospitals have accessible educational materials for patients about the health impacts of climate change?

2	Yes, the medical school or 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.

Score explanation:

- Lectures have been given to patients, in individual disciplines, about the climate which any patient could attend. Over the past 6 months 7 lectures have been delivered on various topics including health, climate change and air pollution. However, this is not an accessible medium available for any patient at point of care.*
- Looking through the [index of leaflets](#) available within NHS Tayside, there are none which relate directly to health impacts of climate change.*

Section Total (11 out of 14)

78.57%

Back to Summary Page [here](#)

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.

Support for Student-Led Planetary Health Initiatives

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

4.1. Does your medical school or your institution offer support for medical students interested in enacting a sustainability initiative/QI project?	
2	Yes, the medical school or institution <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 medical school or institution encourages sustainability QI projects (to fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, but there is no student funding available and there is no requirement to participate.
0	No, neither the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects.
<p><i>Score explanation: Each student at the University of Dundee Medical School is entitled to one-off £250 over the course of their studies for presenting at a conference; this can be on any topic, not specifically climate/sustainability.</i></p> <p><i>Similarly, the student union allows students to start up any society with enough support and every society is eligible to apply for funding. Though they don't offer assistance particular to the climate as yet.</i></p> <p><i>The Design HOPES project is a collaboration between the Medical and Design schools aimed at designing a sustainable healthcare system for the future; run in conjunction with the Binks Institute for Sustainability which facilitates collaboration in the UofD to seek climate solutions.</i></p>	

4.2. Does your institution offer opportunities for medical 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.
<p><i>Score explanation: Every medical student has to complete a project, a student selected component (SSC), each year. There are some on the topic of planetary health and sustainability in healthcare; including service learning that allows for community engagement sustainability projects. However,</i></p>	

there is no guarantee of getting the project you select. Students can, however, self propose a topic, provided they can find a mentor, allowing a much greater scope of research but also clearly requiring students' initiative.

4.3. Does the medical school have a webpage where medical students can find specific information 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 medical school has a web page 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 medical school 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 no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.

Score explanation: The UofD medical school has a webpage dedicated to sustainability, that clearly communicates the sustainability objectives and strategies of the medical school as well as the names and the roles of the sustainability committee. Sustainability activities taking place in and around the medical school are also posted on the web page. Additionally there is a link to a share point, that is shared with the school of life science, for further up to date communications on sustainability and planetary health.

4.4. 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 organisation with faculty support at my medical school dedicated to planetary health or sustainability in healthcare.
1	Yes, there is a student organisation at my medical 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.

Score explanation:

There is not a student organisation dedicated to planetary health and sustainability in healthcare in this medical school.

Whilst the University of Dundee's medical school does have societies whose remit broadly covers sustainability, such as the Students for Global Health group, it is not dedicated towards planetary health or sustainability specifically.

Moreover, the medical school's Sustainability Group, which is dedicated to this topic, is faculty-led with student representation and therefore also does not count towards this question.

4.5. 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.

Score explanation:

The University of Dundee MBChB Student Council's Vice President Anna Antas is an active student representative on the Sustainability Committee, which is working hard to achieve appropriate sustainability targets with leads in undergraduate & postgraduate teaching, operations, laboratory-based and clinical research and the support team.

4.6. 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)

Score explanation:

1. Ninewells hospital, at which the University of Dundee's medical school is based, has a community garden. Students are highly encouraged to volunteer with the garden and gain experience in sustainable food systems. There are also several healthy eating projects involving students that have been arranged with the community food larders and the community garden. Moreover, several projects including free plant giveaways and 'greening' of the indoor areas within the medical school (adding plants etc) have involved students.

2. The sustainability lead for the medical school has organised grand rounds on sustainability which the students are encouraged to attend. There have also been several 'green anaesthesia' events to which both NHS staff and students are invited.

One of the professors involved in the university's sustainability group also hosted a 45 minute lecture and Q&A session for students across the university, focussing on Air Pollution, health & climate change.

3. The local community garden in Dundee hosted talks covering a range of topics, including climate change and climate anxiety. Students were invited to this, allowing them to learn directly from members of a local environmental justice community.

4. The masters students from the Design in Healthcare course presented their final year show at the University of Dundee's medical school. This was an open installation including topics on planetary health that was aimed at medical students.

In addition, the local group Grow Dundee hosted several events focussing on Sustainability and sustainable solutions for garden pests and diseases which students were encouraged to attend.

5. The Woodland Trust group worked with NHS Tayside, of which the medical school is an integral part, to feature a tree plant in October 2022. Students were encouraged to volunteer and join in with this, benefiting the local community and building their resilience.

6. The University of Dundee's medical school proudly supports the student-led Wilderness & Expedition Medicine Society (WEMS), which as part of its activities, regularly organises hikes and backpacking trips across Scotland. WEMS also organises a yearly trip weekend away to enjoy Scotland's wilderness.

Section Total (11 out of 15)

73.33%

Back to Summary Page [here](#)

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.

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 endeavour, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinising every aspect of how our systems operate, from where we source our energy, to how we build our infrastructure, to what companies we invest in. Our medical schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimising environmental impact.*

5.1. Does your <u>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 at least one designated staff member 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 no specific staff member in charge of medical 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><i>Score explanation:</i></p> <p>Medical School - the School of Medicine (SOM) has a dedicated lead for Sustainability Teaching. Additionally, the SOM Sustainability Committee has 15 members including a student representative.</p> <p>University of Dundee - The 'Energy and Environment Office' serves the entire University of Dundee Campus. The office strives to provide a 'unified service for the University community by helping students and staff become more energy and environmentally aware'.</p> <p>The office provides practical guides on topics such as how to cut your carbon emissions and travel more sustainably. They have also set up an online portal where University of Dundee staff can declare a surplus of equipment so as to redistribute to other individuals who are lacking in order to reduce waste. In this office there is an Environment and Sustainability Officer and an Energy Manager.</p> <p>Additionally, within the University, The Carbon Management Board sets strategy. The Climate Action Planning Group will champion decarbonisation towards delivery of net zero carbon. The Environmental Task Group engages with stakeholders and implements practical carbon reduction measures (e.g. energy demand, enhancing heat management, improving thermal efficiency of the estate, electrification of the fleet and promoting environmental awareness etc).</p>	

5.2. How ambitious is your <u>institution/medical school</u> plan to reduce its own carbon footprint?	
5	The institution/medical school has a written and approved plan to achieve carbon neutrality by 2030

3	The institution/medical school has a written and approved plan to achieve carbon neutrality by 2040
1	The institution/medical school has a stated goal of carbon neutrality by 2040 but has not created a plan to reach that goal or the plan is inadequate
0	The institution/medical school does not meet any of the requirements listed above
	<p><i>Score explanation:</i></p> <p><i>The Medical School works with both the University of Dundee, and with NHS Tayside. All institutions (the Medical School, UoD, and NHS Tayside) have written and approved policies:</i></p> <p>Written, approved plans: NHS Tayside Climate Emergency and Sustainability paper Jan 2023 – this outlines several relevant institutional actions. This plan is also available on their website, and the NHS Tayside Annual Climate Emergency and Sustainability report 2021/22, and January 2023, is also available to patients/public.</p> <p><i>The Medical School also has its own written, approved plan – the Sustainability Strategy to achieve Net Zero by 2040. This was presented to the School’s All Staff Meeting for feedback, then to the Senior Management Team, where it was approved.</i></p> <p><i>The University of Dundee is committed to reducing all carbon emissions to a net-zero position by 2045, this follows the recognised ‘Scottish University standard’, the policy can be found –here and also here</i></p> <p><i>This is the University’s Carbon Neutrality Plan, and additionally, the following link to the UoD Scotland University Sustainability Site, shows the Carbon Neutrality: UoD Scotland University PBCCD sustainability Report.</i></p> <p><i>It is the UoD’s high-level ambition, to meet the following targets:</i></p> <ul style="list-style-type: none"> ● <i>To reach Net Zero on greenhouse gases (GHG) by 2045 to help attempts to limit global warming as part of a just transition;</i> ● <i>The University of Dundee is committed to a 75% reduction of GHG emissions by 2035 compared to 2015 levels in line with Scottish Government Targets for the public sector</i> <p><i>These targets represent the UoD’s minimum pledge towards a net zero position.</i></p> <p><i>It has a clear Carbon Management Plan that outlines the work required to reach these targets along with what has already been achieved. More information can be found here: Interim Carbon Management Plan University of Dundee, UK</i></p> <p><i>Overall, this meets the PHRC criteria of 2040, having a written and approved plan for Carbon Management and neutrality.</i></p> <p><i>NHS Tayside has committed to the Scottish Government target of achieving Net Zero by 2040, with all buildings to be heated by zero-emissions technology by 2038.</i></p> <p><i>The current releases state that a plan is progress - “NHS Tayside is working collaboratively with consultancy experts HDR to create a Net Zero Route Map for the entire estate. This will facilitate the board’s progress towards net-zero emissions by 2040. HDR are also supporting us with the input to the EMS.”</i></p>

A [Press Release](#) dated May 2023, stated: “NHS Tayside has committed to the Scottish Government target of achieving **Net Zero by 2040**, with all buildings to be heated by zero-emissions technology by 2038. A Net Zero Route Map is being completed and will be published later this year.”

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

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

Score explanation:

This metric has been scored for Ninewells Hospital as the School of Medicine building is situated within the Hospital, and therefore is tied to NHS Tayside on this metric.

In their [strategy](#) they state: “NHST aim to use renewable heat sources for all of the buildings owned by NHS Tayside by 2038.” (page 5)

And that “In 2021/22, NHS Tayside generated 30,735 kWh of energy from renewable technologies” this is out of a total of 201,186,500 kWh of energy - i.e., 15%, which is an increase of 6% over previous years, so an improvement, though not at 20%.

Ninewells Hospital has completed an 18-month project in partnership with [Vital Energi](#) to improve carbon and energy performance. This included the construction of an energy centre at Ninewells Hospital and Medical School in Dundee, as well as changes to using LED lighting and improving building insulation.

The combined heat and power plant (Energy Centre) was installed in the hospital and now provides 95% of all power and heating for Ninewells.

Since 2020 all new builds and major refurbishment projects across NHS Tayside are [required to be carbon net zero](#). (page 12)

Regarding the University of Dundee as a whole: - released in the Sustainable Network Scotland’s [PBCCD \(Public Bodies Climate Change Duties\) Compliance Report 2021/22](#) :

Under Section 3 Emissions, Projects & Targets - the University states no generation, consumption, and/or export of any renewable energy (part 3c)

The University electricity supplier is a ‘Green supplier’, its electricity usage is 4,630,758, & non-renewable 87,120,176 kwh i.e. 6% green – however, plans are there to improve. Clearly the former 15% is the medical school as UoD figures don’t contain Ninewells.

Plans are being discussed to install solar power on the Jackie Wood building (JWB) which is the only discrete building owned by the University of Dundee, situated at Ninewells Hospital campus.

5.4. Are sustainable building practices utilised for new and old buildings on the medical 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 medical 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 medical 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.

Score explanation:

The University of Dundee is principally located in a compact city campus, however, also occupies and pays for 18% of Ninewells teaching Hospital, where the School of Medicine is situated.

Ninewells Hospital / NHS Tayside – Plan for “All new builds and major refurbishments”:

Since 2020 all new builds and major refurbishment projects across NHS Tayside are [required to be carbon net zero](#). (page 12)

This includes quite extensive refurbishment of areas in Ninewells in the Medical School buildings over the past few years, e.g., removal of asbestos areas, which were then remodelled net zero; refurb of level 7 fitted radiators with controls and insulated windows etc. So ALL remodelling has been to net zero standards in Ninewells since 2020 AND they do conform to recognised standard ie the recognised [NHS Sustainability Design and Construction Guide \(SHTN02-01\)](#)

The following was Outlined in the [NHS Tayside Annual Climate Emergency and Sustainability Report 2021/22, released in Jan 2023](#)

“Sustainable construction:

Where there is a need for new healthcare facilities, we want both the buildings and grounds to be safe, nature-rich, sustainable, resilient and accessible. NHS Tayside is working on the following building projects:

- *A new National Treatment Centre (NTC) is to be built at Perth Royal Infirmary (part of NHS Tayside and a university teaching hospital for University of Dundee). This project is being supported by a site wide Net Zero Route Map which has been developed by external consultants. The new NTC will need to be net zero on completion.*
- *Since 2020 all new builds and major refurbishment projects across NHS Tayside are required to be carbon net zero.*

- NHS Tayside complies with the new [NHS Scotland's Sustainable Design and Construction Guide \(SDaC\)](#). This Guide is NHS Scotland's response to the Scottish Government's climate emergency declarations and related national commitments. It details the process and various approaches, actions plus considerations required to deliver sustainable performance outcomes, with additional supporting standards, signposting to good practice case studies and reference to a number of leading industry frameworks, methodologies and detailed sustainability targets.”

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

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

Score explanation:

The University of Dundee:

Matriculated students can complete the driver's declaration form to request permission to drive University owned/leased/hired vehicles for university business.

There are no such advertised strategies for medical students either on the School of Medicine website or on our internal website. However, the medical school is within the hospital building and the hospital is looking at improving sustainable travel options including a designated cycling lane and safer bike lock ups.

The University has set goals to make sure all staff and students are aware of active travel options around campus.

The university also has conducted research into the type of travel students and staff use regularly. And finally, they have implemented a departmental e-bike initiative to encourage staff to cycle to work.

[Bike Pool](#) - There is a pool of bikes (standard and electric) from the University of Dundee - it is unclear whether these are for both staff and students. These bikes are available for transfer between city campus and Ninewells campus.

NHS Tayside and UoD Medical School staff actively engage in the Cycle to Work Scheme, and have car sharing/pooling options.

Public transport – *Ninewells Hospital has multiple bus services serving it, with buses leaving the hospital every 5 minutes – public transport is very easily accessible, there is direct bus transport*

between Perth Royal Infirmary (PRI) and Ninewells, which is used a lot by patients, staff, students, and visitors.

Salary sacrifice for EV care is currently being explored, and there is also an EV Van for bulky transport of materials to and from the campuses.

NHS Tayside / Ninewells Hospital (Medical School Campus)

[NHS Tayside](#) has a dedicated Active Travel section on its public facing website, which includes links to Tayside region Liftshare schemes - this is not advertised by the Medical School, nor by the [University of Dundee](#) and is not generally common knowledge among the majority of staff or students -

Additionally, the Main Campus at the University of Dundee is a city-based campus, and walking and cycling are generally the most convenient and accessible ways for students to [travel within Dundee](#); most parts are easily reached in 20-30 minutes by bicycle from the city centre.

All the city campus student residences have secure bike storage facilities and bike parking is available in large numbers all across campus.

'Recycled' bike sales and free bike maintenance are organised throughout the year on City Campus as well as Ninewells campus.

This is well-advertised on a regular basis by the School of Medicine, NHS Tayside, and the University of Dundee, and is fairly well-utilised by students and staff.

There are large numbers of bike racks and secure bike storage spread around various locations on Campus, and large numbers of Students and Staff commute by walking short distances from accommodation nearby the campus. Bike paths and cycle networks are available between Dundee City Centre and surrounding areas to Ninewells Hospital Campus/Medical School.

However, access to off-campus clinical sites without a car can be difficult and in the third year and beyond most students drive. Information about environmentally friendly transportation is also not emphasised in orientation.

The University of Dundee released a [Travel Plan for 2015-2022](#)

"This Travel Plan identifies a series of measures to be implemented by the University of Dundee and its partners to support staff, students, visitors and others who use our services and facilities to adopt sustainable travel choices. It is applicable at our main Campus sites of Dundee City, Ninewells and Kirkcaldy."

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

2	Yes, the medical school has both compost and recycling programs accessible to students and faculty.
1	The medical 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 medical school.

Score explanation:

- *Ninewells Hospital and School of Medicine has a conventional recycling program (aluminium/paper/plastic/glass)*
- *Its commercial café sites have recycling bins*
- *The bins around the hospital and medical school are large (about up to hip height) and well signposted. They are appropriately situated in areas that are popular for eating lunch and therefore where most waste is produced (e.g. library, promenade area, café).*

Regarding Composting – there is no widespread composting system at Ninewells available for students and staff, however, the food outlets (i.e. the NHS Tayside kitchens, and the café) do have composting. Compostable cups are also used in these outlets. However, composting is not available for staff or students' own 'brought in' waste. However as most eat in Ninewells dining areas, or use the café, most will be composted.

University of Dundee

The University has a ['Waste Policy'](#) - which expresses its commitment to and recognition of the importance of waste management within their overall Environmental Policy and have specified areas of action on waste.

Additionally the University has a guide on ['Recycling and Disposal of Waste'](#) - The Estates & Buildings Department operates a service for the collection of University generated waste material for Recycling and Disposal, using the Estates Recycling Yard off the City Campus.

There is no known organics recycling program with compost bins available for students or faculty.

The University of Dundee has a [Policy on the use of 'Peat'](#) - The UoD Botanic Garden and Grounds department is concerned about the use of peat in horticulture on wildlife habitats and the release of carbon into the atmosphere. The University is supportive of the research being done to find viable alternatives and are actively reducing the volume of peat being used in the Botanic Garden and Grounds. The Policy states:

“By 2022, we will no longer be using peat in bagged products. To achieve this aim we only purchase peat-free alternatives in every range of growing media we use.

We will only promote peat-free compost in our events and public engagement.

Our staff are trained to support our customers to help them make informed choices and get the best results from growing peat free.

We actively encourage the use of non-peat products, such as manure and mulches, for general soil conditioning and planting.

We have long established composting on site to use as soil ameliorants, top dressing and mulches which have displaced peat for over 5 years.”

5.7. Does the medical 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 medical 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 medical 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 medical school is not engaged in efforts to increase food and beverage sustainability.
0	There are no sustainability guidelines for food and beverages.

Score explanation:

The University of Dundee has a [‘Sustainable Food Policy’](#) - which outlines their recognition of the important of sustainability in food and catering, and describes what the University is doing, and their ‘Green Credentials’ with regards to food, services, and waste

The Conference & Hospitality Services (C&HS) Team at the university is recognised as a Fairtrade caterer.

The University of Dundee also has a [Fairtrade Policy](#), which describes its commitment to supporting initiatives which promote and sustain various fairer trade alternatives. This outlines the steps they have are committed to take to meet the criteria set out by UK's Fairtrade Foundation - their commitment relates to: Making a fairtrade policy (by the Student Union and University); Food sold in Campus Shops; Food served at meetings held by the Student Union and University, and in management offices; a commitment to campaign for increased Fairtrade consumption on campus; and the set up of a ‘Fairtrade Steering Group’.

On the University’s Main Campus the [Premier Shop \(the grocery shop that is associated with Dundee University Student Association \[DUSA\]\)](#) was the winner of the Sustainability Champions award at the nationally recognised 2023 Scottish Grocer Awards. This award goes to a store who has taken steps to reduce their carbon footprint, cut back on waste, inform shoppers on sustainability and encourage recycling in their community.

At the Ninewells Hospital & Medical School Campus

Where the medical school makes their own decisions on food, (out with NHST) there are guidelines for sustainable food and beverages e.g. sandwiches etc. for guests (Medical School Catering), and for the Uni café (Espresso Lab)

In the Medical School’s approved ‘Sustainability Strategy - 2023-2025’, Objective ‘F’ in the statement refers to Sustainable Food. The objective states:

“ The University prides itself on being able to provide a wide and varied catering offer to enhance our staff and student experience here on the Ninewells Campus. This presents opportunities to ensure we do this in an ethical and sustainable way.”

The Action to this objective states:

“The School of Medicine is working closely with NHS Tayside for the procurement and provision of catering outlets across the Ninewells Campus especially in our own newly created Espresso Lab. The Espresso Lab that opened in 2022 has been planned down to the last ‘bean’.”

At the Medical School's coffee shop/cafe (Crema Espresso Lab), the following is stated:

- Our coffee is all fairtrade and responsibly sourced
- Our coffee cups are fully compostable
- Our coffee cup lids are made of Cornstarch
- Our salad boxes are made from recycled bottles and can be recycled
- All our granolas, fruit pots, and yoghurts are supplied in containers that are made of rPet which means they are made from recycled plastic and can be recycled, 100% circular meaning we are not creating any plastic waste
- Our take-away containers are EPP Infinity and are 100% recyclable

The Medical School's new [Sustainable Events, Food and Beverage Policy 2023-2025](#) - details the Strategic Objectives and steps the School is taking which will apply to all food and beverage supplied by Medical School Catering, and in catering outlets on the Ninewells campus at the University of Dundee. The School is working with NHS Tayside to ensure consistency across both institutions. The University acknowledges its responsibility to address sustainability impacts arising from catering and hospitality operations by engaging in procurement and service delivery practices that are environmentally and socially sustainable, while encouraging healthy and sustainable eating.

Some of the key objectives highlighted in this policy include:

- Meat free Monday in our Café and internal catering
- Streamline offerings and pricing to increase non-dairy based milk usage by 10%
- Work towards increasing the amount of organic food procured by regular review of product lines
- We will increase the amount of sustainable palm oil and responsible soya in our sourced products. By continuing to source fairly traded products and ingredients, the University is helping to support farmers across the globe. Fairtrade focuses on increasing farmer's resilience to climate change, aligned with the University's goals.

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

3	Yes, the medical 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 medical 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 medical school is not engaged in efforts to increase sustainability of procurement.
0	There are no sustainability guidelines for supply procurement.

Score explanation:

The University has an environmental and sustainability policy with the following key aims:

- Promote sustainable procurement;

- *Reduce the use of energy and utilities: and*
- *Promoting trade justice by achieving and retaining fair-trade status for the University and Students Union.*

Procurement meet the University's overall strategic aim as well as the requirements of the policy in several ways including:

- *Ensuring sustainability issues are considered at every stage of the Procurement process and in every contract undertaken by Procurement.*
- *Ensuring all contracted and transactional suppliers added to the approved University of Dundee purchasing system are required to sign up to the Sustain Supply Chain Code of Conduct, which covers several sustainability-related areas including compliance with social, ethical and environmental regulations and best practice approaches.*
- *Through contract management review existing contracts and University practices relating to Procurement to establish a more sustainable approach.*

Ninewells hospital (as part of NHS Tayside) has adopted the Marrakesh approach to environmentally sustainable procurement in partnership with Zero Waste Scotland. This approach covers topics such as prioritisation, life cycle impacts, green public procurement and government buying standards.

The institution has also subscribed to the Scottish Sustainable Procurement Action Plan to co-ordinate their sustainable procurement activities.

In addition, a sustainable procurement e-learning module has been created. The University is also committed to applying and promoting sustainable procurement practices.

They have created a webpage specifically for sustainable procurement.

The definition and benefits of sustainable procurement are outlined here.

Finally, there is also a checklist provided to encourage considerations on sustainable procurement. Here is an excerpt from the checklist:

- *Can I repair the product?*
- *Is the product biodegradable?*
- *Does the product contain recycled material?*
- *Do we really need to buy a virgin product when the recycled version is of the same quality?*
- *Does the product have minimal packaging and/or for which there will be take-back by the manufacturer?*
- *Does the product have minimal content and use of toxic substances in production and final product?*

NHS Tayside has public-facing pages online which outline their [aims and responsibilities regarding sustainable procurement](#). This links pages which set out their policies and principles to support NHS Tayside in procuring sustainable goods and services.

In early 2023, the NHS Tayside published the Sustainable Procurement Action Plan, and released the NHS Tayside [Procurement Report](#) 2022-23 which evaluated the Action Plan.

5.9. Are there sustainability requirements or guidelines for events hosted at the medical school?

2	Every event hosted at the medical school must abide by sustainability criteria.
---	--

1	The medical school strongly recommends or incentivizes sustainability measures, but they are not required .
0	There are no sustainability guidelines for medical school events.
<p><i>Score explanation: The University of Dundee School of Medicine has produced a set of new guidelines for medical school events, titled 'Sustainable Events, Food and Beverage Policy: Medical School, University of Dundee', which includes Key objectives for 2023-2025 on how all food and beverage as well as in catering outlets within Ninewells campus at the University of Dundee can be provided more sustainably. This policy is not yet mandatory, and the Sustainability committee is working on getting it approved by the Dean, in order to ensure all events hosted at the Medical School abide by the policy.</i></p>	

5.10. 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 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 medical school to make lab spaces more sustainable.
<p><i>Score explanation:</i></p> <p><i>The labs based at the medical school are part of the larger University of Dundee campus. The UoD has implemented the Green Impact accreditation scheme for students and staff. This scheme encourages staff or students to join a team and work toward bronze, silver or gold accreditation.</i></p> <p><i>Additionally, the Labs within the School of Medicine and University of Dundee, the following points have been implemented:</i></p> <ul style="list-style-type: none"> • <i>Register for freezer challenge to be completed by July 2024.</i> <ul style="list-style-type: none"> o <i>Temperature of all -80°C freezers to be changed to -70°C to reduce energy consumption, reduce heat produced by freezers and reduce air conditioning unit workload, this extends the lifespan of the freezers and air conditioning units.</i> o <i>SLS research labs have already registered for the sustainable labs scheme.</i> o <i>to make researchers in the School aware of how much energy equipment consumes and the small and easy changes that can be made to achieve those savings.</i> o <i>Research groups to rationalise contents of all freezers by discarding all samples no longer required.</i> o <i>Due to freezer content, rationalisation hopes to reduce the number of freezers in use.</i> o <i>Change the temperature of back up freezers to -40°C which reduces their energy consumption considerably.</i> • <i>Number of socket timers required for equipment laboratories so that equipment is only switched on when required without delaying laboratory work.</i> • <i>Large number of “switch off lights” etc signs used for offices & labs.</i> • <i>Recommend research groups participate in Green Impact’s Sustainable Labs programme.</i> 	

- *The Sustainable Labs scheme provides easy, practical actions that are aimed at achieving sustainability across a wide range of areas including but not limited to:*
 - *Scientific equipment*
 - *Waste and Recycling*
 - *Cold storage*
 - *Chemical and materials*
 - *Fume cupboards*
 - *Water*

Additionally, the medical school and NHST also reuse a lot of equipment by passing it to others – recent examples include:

- *2000 plastic gloves, 1500 FFP2/3 masks, 1000 Surgical masks, aprons, plus some obsolete equipment have just sent to Freedom from Fistula Charity in Malawi*
- *Medical textbooks reused via book charity*
- *MRI magnet sent to Ukraine*
- *50 endotracheal intubation kits sent to Africa Mercy ships*
- *Lab coats also sent to Malawi with more to go to our Sustainability shop when opened*

5.11. 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	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.

Score explanation:

*In a [Press Release](#) (October 2021) the University of Dundee announced the **completion of its divestment from fossil fuels** – less than 12 months after stating its intention to do so.*

“The University has also confirmed that half of its managed investments have been moved to a sustainable investment portfolio, with the remaining half to be transferred before the end of the month.

Though having held a relatively small holding in fossil fuel companies, the University announced in November 2020 that it intended to pull this investment within a five-year period. Having been completed four years early, Professor Iain Gillespie, Principal and Vice-Chancellor, revealed details of how Dundee’s portfolio of endowment funds - valued at around £29 million - is being invested responsibly.”

Regarding the *Institution's commitment to reinvest divested funds into renewable energy companies or renewable energy campus initiatives:*

The University's [Carbon Management Plan](#) outlines the current areas of focus managed by the University's Carbon Action Planning Group (CAPG), under the Investment and Financing area of focus the Plan states:

“The priority of this group is to ensure our financial assets are invested sustainably, ethically and responsibly. The University has c£30m of endowment assets which are invested in alignment to our ethical investment policy. Whilst this ensures no investments in fossil fuels, the assets are now invested in a sustainable portfolio which ensures each and every investment has an explicit link to delivery of at least 1 UN sustainable development goal. Further work is ongoing in considering the sustainable investment of other financial assets (cash) and linking future long term debt finance to the University's own carbon reduction ambitions.”

However, despite this plan, there is no specific commitment to reinvest in renewable energy companies or renewable energy campus initiatives

Additional Information:

In November 2020, the University of Dundee committed to [divestment from fossil fuel companies within the next 5 years](#). The decision was approved by the University's Finance and Policy committee after the successful campaigning by the group 'Divest Dundee'.

Professor David Maguire, Interim Principal and Vice-Chancellor of the University, said,

“The University Strategy states that we will build upon our strong track record of improving environmental sustainability to minimise the negative impact we have on the world and its resources. We have a duty to play our part in responding to the climate emergency, and there needs to be actions as well as aspirations. With that in mind we are divesting from fossil fuel companies. We have listened to the staff and student voice on this issue, and they have rightly pressed us to take clear and timely action. Divestment is a process that will take a relatively short amount of time and we are already progressing with that.”

Additionally, a [statement from the University of Dundee](#) says:

“We will not knowingly invest in companies whose activities are in direct conflict with the values that the University publicly espouses and when investing its funds regard will be had to social, environmental, sustainability and governance issues. The Ethical Investment Policy sets out the restrictions that should accordingly be applied and the University endeavours to ensure that any third party Fund Manager follows the United Nations Principles of Responsible Investment and meets the Public Sector Equality Duty under the Equality Act 2010”

Section Total (23 out of 32)

71.88%

Back to Summary Page [here](#)

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.

Grading

Section Overview

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

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

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

Planetary Health Grades for the University of Dundee School of Medicine

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(50/72) \times 100 = 69.44\%$	B
Interdisciplinary Research (17.5%)	$(15/17) \times 100 = 88.24\%$	A
Community Outreach and Advocacy (17.5%)	$(11/14) \times 100 = 78.57\%$	B+
Support for Student-led Planetary Health Initiatives (17.5%)	$(11/15) \times 100 = 73.33\%$	B
Campus Sustainability (17.5%)	$(23/32) \times 100 = 71.88\%$	B
Institutional Grade	$(69.44 \times 0.3 + 88.24 \times 0.175 + 78.57 \times 0.175 + 73.33 \times 0.175 + 71.88 \times 0.175) = 75.44\%$	B+

Report Card Trends

Section Overview

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

