



Planetary Health Report Card (Medicine): *Swansea University Medical School*



2024-2025 Contributing Team:

- Students: Sophie Jones (558788@swansea.ac.uk), Laila Nubi (2033307@swansea.ac.uk), Sarah Osborn (2308530@swansea.ac.uk)
- Faculty Mentors: Dr Rachel Brown (Sustainability lead), Prof Ffion Williams (Head of GEM)
- *Primary Contact: Sophie Jones (558788@swansea.ac.uk)

Summary of Findings

Overall Grade	B-
Curriculum	A-
<ul style="list-style-type: none"> Major progress has been made this year to integrate planetary health/ESH into the curriculum with the national ESH learning outcomes being mapped into our four years of teaching and current learning outcomes. Currently, more lecturers are talking about the connection between climate change and its effects on health since the University started completing the planetary health report card. The Future of the Medics fortnight has allowed the medical school to deliver more teaching in planetary health as well as provide lectures on topics that they have struggled to fit into the condensed 4-year course. Recommendations: More teaching could be provided on how to discuss the connection between health and climate change in consultation with patients and more teaching on social prescribing to back up the information given in consultation. 	
Interdisciplinary Research	B
<ul style="list-style-type: none"> Swansea University demonstrates a commitment to planetary health research, with an emphasis on interdisciplinary sustainability through their Climate Research Institute and a dedicated website region. Despite this, underrepresented voices are not invited for their inputs, nor are there opportunities to connect through conferences and planetary health organisations. Recommendations: Using Swansea University facilities to host conferences, and collaborating with planet health organisations, such as Planet Health Alliance, and engaging with those most impacted by the climate would improve our interdisciplinary research. 	
Community Outreach and Advocacy	F
<ul style="list-style-type: none"> Currently there is minimal outreach and / or advocacy within the institution. In the community hospitals there is little to no information on the planetary health effects provided by healthcare professional teams for patients. Recommendations: There is opportunity to improve outreach in the local community by producing a planetary health newsletter that regularly informs individuals of recent publications, news and events globally as well as locally. With support from the institute and local health boards the publication of planetary health patient information leaflets with suggestions of achievable actions to deliver better health to themselves and the planet for the improvement of advocacy. 	
Support for Student-Led Initiatives	B-
<ul style="list-style-type: none"> The sustainability lead staff in the medical school has continued to positively impact the progress of the sustainable teaching and practices on the course. Recommendations: The medical school could provide further support to students with interest in planetary health initiatives by creating a hub for information regarding planetary health research. This could include advertising opportunities for research in sustainability, advice for contacting project mentors within the faculty and listing available grants for related research. Appointment of a student representative within the cohort would enable liaison with the faculty and increase the student engagement with these potential initiatives. 	
Campus Sustainability	B+
<ul style="list-style-type: none"> It is disappointing to find out that Swansea University has had to downgrade our renewable energy use due 	

to the green tariff being more expensive than a standard tariff. This is something that should be discussed at government level to support Universities financially. The University is, however, making high level commitments towards the sustainable food policy.

- **Recommendations:** Commitment to return to 100% renewable energy and secure funding so that the green tariff will always be our only tariff option.

Statement of Purpose

Planetary health is human health.

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

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

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

Definitions & Other Considerations

Definitions:

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

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

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

Other considerations:

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

Completed in 2022 a [Literature Review by Metric](#) is available for the 2022 medicine report card metrics. We are in the process of updating this review and making it more applicable to all the disciplines. However the review serves as a rough collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

Planetary Health Curriculum

Section Overview: This section evaluates the integration of relevant planetary health topics into the 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?	
Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year. (3 points)	
Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year. (2 points)	
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. (1 points)	
No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. (0 points)	
Score Assigned:	0
<i>Score explanation:</i> We do not currently have any student-selected modules specific to ESH or planetary health, but the medical school is working on developing these.	

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

Score Assigned:	3
<p><i>Score explanation:</i> In the first year we have a lecture titled “An introduction to environmentally sustainable healthcare”. The GP lecturer discusses the effects of climate change on population and individual health and creates an interactive session with students. In this session, we are asked to write about how climate change can affect health and how we can work to change outcomes for ourselves and patients. Recycling is discussed in detail, especially in clinical environments. Welsh targets are discussed with a focus on becoming carbon neutral by 2030.</p> <p>In the International Health week in second year, there is another lecture on "Climate change and global health" as well as "Burden of Childhood Diseases and Sustainable Development Goals"</p> <p>In the third year, there is a session called ‘Climate Emergency and You’ run by three doctors that covers this in-depth, especially in regards to impact on cardiorespiratory systems</p> <p>In fourth year, there is a whole morning dedicated to Greener Healthcare that addresses this issue during Future Medics fortnight.</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?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	3
<p><i>Score explanation:</i> As above, there is a collaborative session led by Dr Richard Thomas that explores this titled ‘An Introduction to Environmentally Sustainable Healthcare’, guided by the Education for Sustainable Healthcare document, covering topics such as effects on mental health, fatalities, displacement, and healthcare provision.</p> <p>In the third year, there is an ICM (Integrated Clinical Method) session called ‘Climate Emergency and You’ run by three doctors that cover how as medics we can discuss the effects of the climate on patient health with the patient and how to approach this topic. It further explores the potential strategies we as medical students can encourage and employ throughout our career.</p> <p>In fourth year, there is a whole morning dedicated to Greener healthcare that addresses this issue during Future Medics fortnight.</p> <p>The topic is also briefly covered in the emergency medicine public health series in year two.</p>	

1.4. Does your <u>medical school</u> curriculum address the impact of climate change on the changing patterns of infectious diseases?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	

This topic was not covered. (0 points)	
Score Assigned:	3
<i>Score explanation:</i> This is addressed several times throughout the course. Briefly covered in a global health week at the beginning of year 2 concerning the spread of malaria, under the learning objective of ‘Describe the major diseases and risk factors for ill health at the global level and how they are measured’. It is also discussed in a lecture titled “Parasitology: Vectors of Infection”. Also covered in International Health Week is a lecture with one slide on global goals for sustainable development. Public health lectures throughout the course look at pandemics (on the increase due to COVID-19) and mention communicable diseases looking at the impact of climate change. It is also discussed in year 4 during “Future Medics Greener Healthcare” session.	

1.5. Does your <u>medical school</u> curriculum address the respiratory health effects of climate change and air pollution?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	3
<i>Score explanation:</i> It is covered in depth within the Future Medics Fortnight by a range of speakers, from public health consultants to respiratory research physiologists. They emphasise the impact of the industrial factories in the area and the mining background of a significant portion of the Swansea population and how prevalent the air pollution’s negative impact is on individuals, with many developing malignancies and life-long respiratory conditions as a result. This topic is also briefly covered in COPD week in one slide on air pollution causing COPD. Also covered in Year 3 ICM sessions.	

1.6. Does your <u>medical school</u> curriculum address the cardiovascular health effects of climate change, including increased heat	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	2

Score explanation: This is covered in the third year ICM (Integrated Clinical Method) teaching sessions where we have clinical cases which involve environmental and industrial causes of CVD and we work through history, examination and investigations for each case, as well briefly during the International Health week at the beginning of second year, taking into consideration the impact on thermoregulation and cardiovascular strain due to extreme heat events, such as during bushfires.

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

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

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

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

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

Score Assigned:

2

Score explanation: This topic is covered in a lecture for first-years, Intro to Sustainable Healthcare. In the second year, there is a learning outcome to “describe how diverse global factors affect health, well-being, and health care delivery in the UK”. Also as an ICM session in the third year, the main take-away points are the rise in anxiety-related symptoms, feelings of helplessness/hopelessness, and feelings of dissociation among the younger population especially. It is also addressed under the learning outcome ‘To aid students developing strategies to cope with Climate Anxiety (solastalgia)’ for the Greener Healthcare lecture in fourth-year future medics weeks.

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

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

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

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

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

Score Assigned:

3

Score explanation: This was covered extensively during the International Health week in second year as well as in a lecture on public health in first year. Comparisons were drawn between Swansea (an area with relatively secure access to food and water) and other countries globally, especially those conflict ridden, and how lack of secure access to food and water due to political and ecosystem changes causes varying health conditions and have to be dealt with in creative and innovative ways due to lack of resources.

In the third year this topic falls under the ICM learning outcome of 'To identify how global warming and climate change can affect patients and healthcare and vice versa using case studies'. It is also covered in the Future Medics fortnight conducted in 4th year, looking at the effects of food security and ecosystem health, exploring the One Health model.

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

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

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

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

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

Score Assigned:

3

Score explanation: This is actively encouraged as a topic to discuss on the Swansea 'RRHiME' (Rural and Remote Health in Medical Education) track which we can opt into at the start of the course. This route gives students rural medicine placements/activities to witness the difference in working in rural areas as well as high vs low SES. Topics for our poster presentations in the first year were also open to discuss high vs low SES impact on health and statistic/public health lectures covered this in detail. This topic is also covered in second year called "Healthcare for homeless people" and in detail during the Future Medic fortnight in fourth year, specifically in the lectures 'Health Inequalities' and 'One Health', which talked about access to care, quality and experience of care and wider determinants of health and how these are significantly worse for those living in rural areas vs urban, those with specific characteristics (eg. sex, ethnicity, disability) and socially excluded groups. This falls under the learning outcomes 'To evaluate the determinants of health and disease and variations in healthcare delivery and medical practice from a global perspective and explain the impact that global changes may have on local health and wellbeing' and 'To evaluate the environmental, social, behavioural and cultural factors which influence health and disease in different populations'.

It was also briefly covered during the international health week.

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

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

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

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

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

Score Assigned:	3
<p><i>Score explanation:</i> In the International Health week in second year, there is another lecture on "Climate change and global health" as well as "Burden of Childhood Diseases and Sustainable Development Goals" A Medecins Sans Frontieres doctor teaches this session about mother and infant mortality with a focus on infant mortality. Global sustainable development goals are discussed in the form of social, economical, environmental, domestic and earth observational data with more information that can be found here.</p> <p>This topic was covered in detail during the Future Medic fortnight in the fourth year, specifically in the lectures 'Health Inequalities' and 'One Health', informing on the differences in physical environment and their impact on health and the potential benefits of pursuing environmental sustainability and health equity together.</p> <p>It was also briefly covered during the international health week.</p>	

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

1.11. Does your <u>medical school</u> curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	2
<p><i>Score explanation:</i> This topic is covered within the Future Medics Fortnight and addresses topics such as links between air pollution and lower birth weight and lower fertility, specifically under the learning outcome of 'To understand that outside influences can damage both the environment and health , using the example of air pollution'</p> <p>There was also a talk ('Greener practice') during the women's health block in third year that briefly touched on this.</p>	

1.12. Does your <u>medical school</u> curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	2

Score explanation: Within the Future Medics fortnight, the lecture on One Health looks at the effects of mining and slag heaps on health and other topical issues within Wales. As Wales is known for its mining history it is regularly discussed in workshops and history taking the importance of occupational information from patients and discuss with them the effects their occupation can have on their health and the health of their household.

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?

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

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

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

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

Score Assigned:

0

Score explanation: There are lecture series on the population of Wales and health inequalities faced within the local population but not on Indigenous people and their cultures and customs. The University is strong in its sustainability values and encourages all students to grow their own fruit and vegetables. There are many workshops, including Go Green Week to get people talking about the planet and green spaces and thinking more about the natural environment

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?

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

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

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

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

Score Assigned:

2

Score explanation: While not covered in detail, this topic was briefly covered in lectures on Health Inequalities and Greener healthcare during Future Medics fortnight while talking about access to care, quality, and experience of care and wider determinants of health and how these are significantly worse for those living in rural areas vs urban, those with specific characteristics (e.g. sex, ethnicity, disability) and socially excluded groups, under the learning outcome of ‘To evaluate the role of ecological, environmental and occupational hazards in ill-health and discuss ways to mitigate their effects.’ It was also covered under the learning objective of ‘Describe factors

affecting maternal health in the developing world' during International Health Week in the second year.

Curriculum: Sustainability

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

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

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

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

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

Score Assigned:

3

Score explanation: This is addressed comprehensively in a first year public health lecture falling under the following learning objectives: To recognise sociological factors that contribute to illness, the course of disease, and the success of treatment and apply these to patients including issues relating to health inequalities and social determinants of health; To recognise environmental, social, psychological, behavioural, and cultural factors influencing a patient's presentation and identify options to address these including advocacy for those who are disempowered. This is also covered in the Introduction to Sustainable Healthcare in year 1.

ICM sessions in second and third year also cover this, as well as multiple lectures during the Future Medics fortnight in fourth year- One Health, Nutrition, and Lifestyle Medicine under the learning outcomes of 'Understand that lifestyle medicine is likely to be one of the solutions to some of the major challenges facing healthcare, including our need to reach carbon net zero' and 'Understand how our own diet is likely to impact on health.'

1.16. Does your medical school curriculum address the carbon footprint of healthcare systems?

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

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

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

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

Score Assigned:

3

Score explanation: This is covered in conversations during ICM, placements and Learning Opportunities in a Clinical Setting (LOCS).

It is also covered in the public health lecture in first year, going into detail covered in the Education for Sustainable Healthcare [document](#), and the various ways different healthcare specialties can minimise their impact on the carbon footprint.

It was also heavily detailed in our discussions in the introduction to environmentally sustainable healthcare lecture where students discussed new ways to reduce the carbon footprint of healthcare systems starting with recycling in hospitals and businesses. This came into force for businesses in April 2024. A society run by medical students named “Swansea Action for Sustainable Healthcare” held a meeting with general practices to inform them of recycling policies after this informative lecture.

It is also mentioned in the Greener Healthcare lecture in Future Medics fortnight falling under the learning outcomes ‘To understand that Healthcare has adverse environmental effects, most pressing on Global Warming’ and ‘To understand actions which can reduce the impact of Healthcare on the environment.’

1.17. Does your <u>medical school</u> curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (points for each)	Score
The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment (2 points)	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. (2 points) .	2
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 point)	1
Environmental impact of surgical healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	1
The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anaesthetic’s environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)	1
The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)	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) (1 point)	1
<p><i>Score explanation:</i> Many of these topics are covered within the Future Medics fortnight in 4th year, in lectures such as Pharmacogenomics, Health Inequalities, Big Pharma, One Health and Greener Healthcare. They are also covered within ICM lectures in first, second and third year. There is a huge emphasis on the importance of avoiding polypharmacy due to its health and environmental impacts, and is addressed repeatedly throughout the course. Swansea University Medical School aims to include teaching about the environmental impact of how we deliver healthcare. The above</p>	

metrics fall under the following themes specifically: General health benefit of acting differently in regards to climate change, Global Warming caused by healthcare, and Cutting the carbon footprint of healthcare. The topic of different inhalers and their varying impacts on the environment is also extensively covered across all four years and is examinable.

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?

Yes, there are strategies introduced for having conversations with patients about climate change in the **core** curriculum. (2 points)

Yes, there are strategies introduced for having conversations with patients about climate change in **elective** coursework. (1 points)

No, there are **not** strategies introduced for having conversations with patients about climate change. (0 points)

Score Assigned:

0

Score explanation: Although students are taught how to take various types of histories and explain health related concepts, there are no specific strategies introduced in regards to the health effects of climate change. We are taught motivational interviewing as a communication skills technique but also not specific to climate and health.

1.19. In training for patient encounters, does your medical school's curriculum introduce strategies for taking an environmental history or exposure history?

Yes, the **core** curriculum includes strategies for taking an environmental history. (2 points)

Only **elective** coursework includes strategies for taking an environmental history. (1 point)

No, the curriculum does **not** include strategies for taking an environmental history. (0 points)

Score Assigned:

2

Score explanation: We are taught and examined on taking a full and detailed social history. This includes occupation, lifestyle, accommodation, hobbies which allows us to explore exposure history concerning work or climate. As Wales is known for previously having an industrial workforce with the coal and steel industry we must cover exposure as it is relevant to our clinical outcome. This is covered both in lectures and in ICM.

Curriculum: Administrative Support for Planetary Health

1.20. Is your medical school currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?

Yes, the medical school is currently in the process of making **major** improvements to ESH/planetary health education. (4 points)

Yes, the medical school is currently in the process of making **minor** improvements to ESH/planetary health education. (2 points)

No, there are **no** improvements to planetary health education in progress. (0 points)

Score Assigned:

4

Score explanation: The medical school is making major improvements to the timetable by mapping the current national ESH learning outcomes to our medical school learning outcomes that should be in place by September 2025. Also the SWASH (Swansea Action for Sustainable Healthcare) society has grown in 2024/25 allowing more time to plan teaching sessions within the medical school. The plans are to teach as many healthcare students as possible about diet, asthma, and sleep (and the climate effects) initially so that this can benefit the wider population. Currently, this will be carried out with a volunteer GP, volunteer general surgeon and the society. Funding will have to be obtained to add this to the curriculum. SWASH society are also involved with the NSH forest (Cae Felin) and wants to introduce this into a half-day session for all healthcare students to have a hands-on learning experience and see the benefits of the environment on health. We will also attempt again to contact all clinicians leading the teaching week to request them to add, where possible, teaching about climate effects on health in their lectures.

1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core curriculum?

Planetary health/ESH topics are **well integrated** into the core medical school curriculum. (6 points)

Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum. (4 points)

Planetary health/ESH is not integrated and is primarily addressed in **(a) standalone lecture(s)**. (2 points)

There is **minimal/no** education for sustainable healthcare. (0 points)

Score Assigned:

6

Score explanation: The medical school has made a lot of progress in the last couple of years and ensured better integration of ESH/planetary health topics throughout the four years of the GEM curriculum. These are now covered to a significant extent in all years.

1.22. Does your medical school employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme

throughout the course?	
Yes, the medical school has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)	
No, the medical school does not have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)	
Score Assigned:	1
<i>Score explanation:</i> Dr Rachel Brown is the appointed sustainability lead for the GEM programme and actively liaises with staff and students on implementing better sustainable strategies regarding healthcare into the curriculum.	
Section Total (59 out of 72)	
81.94%	

Back to Summary Page [here](#)

Interdisciplinary Research

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

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your <u>institution</u>?	
Yes, there are faculty members at the institution who have a primary research focus in planetary health or sustainable healthcare/vetcare. (3 points)	
Yes, there are individual faculty members at the institution who are conducting research related to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points)	
There are sustainability researchers at the institution , but not specifically associated with healthcare/vetcare. (1 point)	
No, there are no planetary health and/or sustainability researchers at the institution at this time. (0 points)	
Score Assigned:	3
<i>Score explanation:</i> Swansea Medical School has several research groups with a sole focus on planetary health and the intersection with health. This includes collaboration with the Wellcome Trust to investigate the impact of climate change on mums-to-be , their own Environment and Health Research Centre (ENVHE) , and exploring the safety of nanomaterials .	

2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your <u>institution</u>?	
There is at least one dedicated department or institute for interdisciplinary planetary health research. (3 points)	
There is not currently a department or institute for interdisciplinary planetary health research, but there are plans to open one in the next 3 years. (2 points)	
There is an Occupational and Environmental Health department , but no interdisciplinary department or institute for planetary health research. (1 points)	
There is no dedicated department or institute. (0 points)	
Score Assigned:	3

Score explanation: Swansea University has a it's [Climate Action Research Institute](#), which “aims to bring together the whole Swansea University community for interdisciplinary research in fighting for the future of a planet for our children “. With academic representatives on [Welsh Government Clean Air Advisory Panel](#), and [UKRI Green Future Advisory Board](#)

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

Yes, there is a process in which community members impacted by climate and environmental injustice have **decision-making power** in the climate + environmental research agenda. (3 points)

Yes, there is a process in which community members impacted by climate and environmental injustice **advise** the climate + environmental research agenda. (2 points)

No, but there are **current efforts** to establish a process for community members to advise or make decisions on the research agenda. (1 points)

There is **no** process, and **no** efforts to create such a process. (0 points)

Score Assigned:

1

Score explanation: At Swansea University, there is no formal means to embed communities disproportionately impacted by the climate crisis in research agenda. However, the emphasis on [early year learners](#) and equipping them with tools to understand and advocate for sustainability shows their willingness to bring under-represented voices into the institution. There are also projects associated with ENHVE which look at [gypsy and traveller health, and maternal health](#).

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

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

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

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

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

Score Assigned:

3

Score explanation: Swansea University has a [Sustainability section](#) of it's site which offers direction to sustainable labs, coming events, funding opportunities, and key focal points of sustainability within its community.

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

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

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

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

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

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

Score Assigned:

1

Score explanation: A conference exploring planetary health has not been hosted at Swansea in the last three years, however funding has been made available for “[Go Green Week](#)” during which talks on planetary health feature.

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

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

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

Score Assigned:

1

Score explanation: Yes, Dr Rachel Brown is a member of the Medical Schools Council ESH Alliance. Also Professor Ffion Williams is involved with the ESH (Environment, Safety and Health) curriculum mapping for September 2025.

Section Total (12 out of 17)

70.59%

Back to Summary Page [here](#)

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>institution</u> partner with community organisations to promote planetary and health?	
Yes, the institution meaningfully partners with multiple community organisations to promote planetary and environmental health. (3 points)	
Yes, the institution meaningfully partners with one community organisation to promote planetary and environmental health. (2 points)	
The institution does not partner with community organisations, but participates in community focused events relating to planetary health. (1 point)	
No, there is no such meaningful community partnership. (0 points)	
Score Assigned:	0
<i>Score explanation:</i> There is no meaningful partnership as of yet, however there are a couple of individuals who are part of community organisations that promote planetary and environmental health.	

3.2. Does your <u>institution</u> offer community-facing courses or events regarding planetary health?	
The institution offers community-facing courses or events at least once every year. (3 points)	
The institution offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points)	
The institution has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point)	
The institution has not offered such community-facing courses or events. (0 points)	
Score Assigned:	0

Score explanation: No such courses or events have been offered.

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

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

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

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

Score Assigned:

1

Score explanation: Students occasionally get notified of events/research updates related to planetary health and sustainable healthcare via email communication.

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

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

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

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

Score Assigned:

0

Score explanation: There are no professional education activities currently targeting post graduates related to planetary health and sustainable healthcare.

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

Yes, the **institution** has accessible educational materials for patients. (2 points)

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

No affiliated hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	0
Score explanation: There are no such educational materials for patients.	

3.6. Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about the health impacts of climate change?	
Yes, the institution have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	1
Score explanation: Some speciality departments in some hospitals have relevant pamphlets which explore the effects of climate change on specific chronic health conditions e.g. asthma.	

Section Total (2 out of 14)	14.29%
-----------------------------	--------

Back to Summary Page [here](#)

Support for Student-Led Planetary Health Initiatives

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

4.1. Does your institution offer support for students interested in enacting a sustainability initiative/QI project?	
Yes, the institution <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. (2 points)	
The institution encourages sustainability QI projects (to fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, but there is no student funding available and there is no requirement to participate. (1 point)	
No, the institution does not offer opportunities or support for sustainability initiatives or QI projects. (0 points)	
Score Assigned:	1
<i>Score explanation:</i> Swansea University Medical School (SUMS) encourages students to research and participate in projects of areas of interest such as sustainability in healthcare. The faculty and Swansea Action for Sustainable Healthcare provide support and research opportunities to facilitate these optional projects however currently there is no funding available for this.	

4.2. Does your institution offer opportunities for students to do research related to planetary health and/or sustainable healthcare/vetcare?	
The institution has a specific research program or fellowship for students interested in doing planetary health/sustainable healthcare/vetcare research. (2 points)	
There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these require student initiative to seek these out and carry them out in their spare time. (1 point)	
There are no opportunities for students to engage in planetary health/sustainable healthcare research. (0 points)	
Score Assigned:	1
<i>Score explanation:</i> Research within planetary health can be arranged by medical students in their free time or as part of elective clinical or within research opportunities that arise throughout the course. Currently there is no specific programme or fellowship for this offered by SUMS.	

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

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

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

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

Score Assigned:

0

Score explanation: Currently there is no medical school specific webpage for this criteria.

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

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

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

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

Score Assigned:

2

Score explanation: Swansea Action for Sustainable Healthcare (SWASH) is an interdisciplinary student led society which aims to reduce the environmental impact of healthcare practice and education. The society is supported by faculty / clinical members Dr Thomas, Mr Beasley and Dr Brown.

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

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

No, there is no such student representative. (0 points)	
Score Assigned:	0
<i>Score explanation:</i> There is no student representative with this specific role.	

4.6. In the past year, has the <u>institution</u> had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	Score
Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.	1
Panels, speaker series, or similar events related to planetary health that have students as an intended audience.	1
Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.	1
Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	1
Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	0
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1
<i>Score explanation:</i> The university hosted their annual Go Green week for students and general public that included 30 various sustainable events, including two Green Fairs, workshops, and exhibitions. This was run as a result of the collaboration between the university's sustainability team, community experts and local businesses. During this week there were various speakers which attended to deliver talks on sustainability and climate change. We encourage students and members of the public during the Green Fair to live more eco aware and give information on recycling, sustainable fashion, beach cleans, university projects and general information on living a more sustainable lifestyle.. The university has a student and staff growing project, Tyfu Tawe, on both campuses for growing vegetables as well as herbs. The university sustainability team also runs monthly beach cleans and conservation taster sessions at the university's nature reserve Crmlyn Burrows.	

Section Total (9 out of 15)	60%
------------------------------------	------------

Back to Summary Page [here](#)

Campus Sustainability

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

5.1. Does your <u>institution</u> have an Office of Sustainability?	
Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is at least one designated staff member for sustainability at the hospital. (3 points)	
There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but no specific staff member in charge of hospital sustainability. (2 points)	
There are no salaried sustainability staff , but there is a sustainability task force or committee. (1 point)	
There are no staff members or task force responsible for overseeing campus sustainability. (0 points)	
Score Assigned:	3
<i>Score explanation:</i> Yes, within the corporate responsibility team there are full-time sustainability roles across the university. Dr Rachel Brown is a sustainability lead who liaises with students and staff to ensure continuous involvement and progression of planetary health into the curriculum and clinical activities but her role is not solely ESH. Each hospital also has a sustainability lead within the health board.	

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

Score explanation: The university has a plan called ‘Sustainability and Climate Emergency Strategy’ and is committed to achieving zero scope 1 and 2 carbon emissions and reducing scope 3 by 50% by 2035. To find more information on this, please click [here](#).

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

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

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

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

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

Score Assigned:

2

Score explanation: As of this year the University is no longer 100% powered by renewable energy due to the green tariff being much more expensive. We are currently on the standard grid tariff for the time being until the University is in a better place financially. We do however, still have onsite solar grid and ground source heat pump.

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

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

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

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

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

Score Assigned:

3

Score explanation: ILS1, 2 (Institute of life sciences 1, 2) and data science are all BREEAM (Building Research Establishment Environmental Assessment Methodology) Excellent or above and other buildings retrofitted with lower carbon [technologies](#).

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

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

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

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

Score Assigned:

2

Score explanation: The medical school strongly encourages the use of public transport. They try to discourage students from using a car as a form of transport where possible by recommending buses with easy transport links including those to the hospitals and placements. More information can be found here: <https://www.swansea.ac.uk/sustainability/travel/>. For placements that are much further afield they ask that we declare which students have access to a car to make sure journeys are shared with other students to reduce the impact of travel on the environment. The university is also gold 'Cycle Friendly Employer' and has set-up the Santander bike scheme for Swansea.

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

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

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

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

Score Assigned:

2

Score explanation: In every corridor and room on campus you can find paper/cardboard/plastic/metal/glass recycling. In more populated areas you will find food and coffee cup recycling. The university carries out anaerobic digestion for all food waste generated on campus.

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

Yes, the institution has adequate sustainability requirements for food and beverages, including meat-free days or no red-meat, and is engaged in efforts to increase food and beverage sustainability. (3 points)	
There are sustainability guidelines for food and beverages, but they are insufficient or optional . The institution is engaged in efforts to increase food and beverage sustainability. (2 points)	
There are sustainability guidelines for food and beverages, but they are insufficient or optional . The institution is not engaged in efforts to increase food and beverage sustainability. (1 point)	
There are no sustainability guidelines for food and beverages. (0 points)	
Score Assigned:	2
<i>Score explanation:</i> There are high level commitments that are currently being worked on at the University. Please see sustainable healthy food policy here . There is also an action plan that is currently being worked on and updated to ensure local food sourcing, coffee ground collection, reduction of single use plastics and a focus on vegan dishes with ‘plant powered party’ events encouraging awareness of the vegan options. The medical school is not involved in this but it has been discussed in a meeting between SWASH and Dr Brown and Professor Williams to build awareness about the need to offer more plant based meals.	

5.8. Does the <u>institution</u> apply sustainability criteria when making decisions about supply procurement?	
Yes, the institution has adequate sustainability requirements for supply procurement and is engaged in efforts to increase sustainability of procurement. (3 points)	
There are sustainability guidelines for supply procurement, but they are insufficient or optional . The institution is engaged in efforts to increase sustainability of procurement. (2 points)	
There are sustainability guidelines for supply procurement, but they are insufficient or optional . The institution is not engaged in efforts to increase sustainability of procurement. (1 point)	
There are no sustainability guidelines for supply procurement. (0 points)	
Score Assigned:	3
<i>Score explanation:</i> Sustainability requirements in major tenders is not optional and also already integrated through main procurement frameworks, LEAF (Laboratory Efficiency Assessment Framework), Sustainable Procurement policy and guidance like the top tips for Lab and Office procurement.	

5.9. Are there sustainability requirements or guidelines for events hosted at the institution?
Every event hosted at the institution must abide by sustainability criteria. (2 points)

The institution strongly recommends or incentivizes sustainability measures, but they are not required . (1 point)	
There are no sustainability guidelines for institution events. (0 points)	
Score Assigned:	1
<i>Score explanation:</i> We have guidance and support available for hosting a sustainable event, but this is down to the medical school to implement case by case.	

5.10. Does your <u>institution</u> have programs and initiatives to assist with making lab spaces more environmentally sustainable?	
Yes, the institution has programs and initiatives to assist with making lab spaces more environmentally sustainable. (2 points)	
There are guidelines on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)	
There are no efforts at the institution to make lab spaces more sustainable. (0 points)	
Score Assigned:	2
<i>Score explanation:</i> The CR Plus team inspect labs for sustainability (waste, decommissioning old equipment etc.) Sustainable labs website, LEAF (used by ILS1 accelerate lab, 2nd floor, 5th floor, NMSF and diabetes, 4th floor, CNH and teaching labs joining in 2021) and SWell (staff engagement app), SUMS Safety and Sustainability NEtwork.	

5.11. Does your <u>institution's</u> endowment portfolio investments include fossil-fuel companies?	
The institution is entirely divested from fossil fuels and has made a commitment to reinvest divested funds into renewable energy companies or renewable energy campus initiatives. (4 points)	
The institution is entirely divested from fossil fuels. (3 points)	
The institution has partially divested from fossil fuel companies or has made a commitment to fully divest , but currently still has fossil fuel investments. (2 points)	
The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organised advocacy for divestment. (1 point)	
Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that. (0 points)	
Score Assigned:	2

Score explanation: The University entirely divested fossil fuels in 2019 and 100% of energy was backed by renewable energy but due to the cost of the green tariff this has changed in 2025. The University was unable to sustain this financially and is now on a standard tariff using partial fossil fuels. I have added our previous ethical investment policy which we will continue to work towards which can be found [here](#).

Section Total (25 out of 32)

78.13%

Back to Summary Page [here](#)

Grading

Section Overview

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

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

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

Planetary Health Grades for the Swansea University School of Medicine

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(59/72) \times 100 = 81.94\%$	A-
Interdisciplinary Research (17.5%)	$(12/17) \times 100 = 70.59\%$	B
Community Outreach and Advocacy (17.5%)	$(2/14) \times 100 = 14.29\%$	F
Support for Student-led Planetary Health Initiatives (17.5%)	$(9/15) \times 100 = 60\%$	B-
Campus Sustainability (17.5%)	$(25/32) \times 100 = 78.13\%$	B+
Institutional Grade	$(A \times 0.3 + B \times 0.175 + C \times 0.175 + D \times 0.175 + E \times 0.175) = 63.61\%$	B-

Report Card Trends

Section Overview

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

Planetary Health Report Card Trends for Swansea University

