

# Planetary Health Report Card (Medicine): University Of Birmingham



#### 2024-2025 Contributing Team:

- Students: Rhea Khosla\*, Anushka Lahiri, Emma Mayger-Dutfield, Joshua Poole
- Faculty Mentors: Chris McCabe

\*Primary Contact: Rhea Khosla, rheakhosla1@gmail.com

Land acknowledgment:

#### **Summary of Findings**

Overall Grade	C
---------------	---

#### Curriculum D

- The University of Birmingham's Medical School curriculum does include sufficient opportunity to study the environment in the context of medicine, however, there is rarely integration of this content into the core curriculum. The majority of the environmental teaching is also UK-centric.
- **Recommendations:** The University is in the midst of developing its new medical curriculum, and should better integrate planetary health teaching into all years. The University does not currently have a dedicated member of staff to champion the importance of planetary health content in the curriculum, and should look into creating and filling this role.

#### **Interdisciplinary Research**

**B**+

- The University of Birmingham has a dedicated institute with its primary focus on interdisciplinary research into planetary health and researchers. They have also held many planetary health focused events.
- **Recommendations:** The University should consider creating a process to involve communities affected by climate change in their research. Additionally, they should consider becoming a member of a planetary health organisation.

#### **Community Outreach and Advocacy**

D

- The University of Birmingham provides little community outreach on planetary health, however, multiple non-Medical courses meaningfully partners with multiple community organisations to promote planetary and environmental health. The University Hospitals Birmingham Trust provides a climate change e-learning course. No patient information is provided on the relationship between sustainability and health.
- **Recommendations:** The University should restart planetary health events and increase access to educational material on environmental health exposures,

#### Support for Student-Led Initiatives

**A-**

- The University of Birmingham Medical School offers specific opportunities for students to do research into planetary health, for example through an intercalated degree, and the ability to choose a sustainability focused quality improvement project. It also supports student-led societies such as Earth Resus Team.
- Recommendations: The University should consider offering grants to students for projects on the topic of
  sustainability, alongside making these a compulsory part of the curriculum. They should also consider
  creating programmes or events to encourage students to collaborate with local environmental justice
  communities.

#### **Campus Sustainability**

C +

- The University has a dedicated sustainability team, a Smart Campus initiative, sustainable procurement policies, and extensive public transport accessibility. However, it falls short in achieving full divestment from fossil fuels, completely renewable energy sourcing, and mandatory sustainability requirements for events. It has a net zero plan for scopes 1 and 2 by 2035 but aims for overall carbon neutrality only by 2045.
- **Recommendations for Improvement:** To improve its sustainability efforts, the University should fully divest from fossil fuels, accelerate its transition to 100% renewable energy, implement a campus-wide "Meatless Monday" or similar initiative, expand building retrofits for energy efficiency, and mandate sustainability guidelines for events.

#### **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's training. It is imperative that we hold our institutions accountable for educating health professional 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 and 5) school campus sustainability.

#### **Definitions & Other Considerations**

#### **Definitions:**

- Planetary Health: is described by the Planetary Health Alliance as "the health of human civilisation and the state of the natural systems on which it depends." For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional 'environmental health' examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of health professional's 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.
- Extractivisim: 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 <u>Literature Review by Metric</u> 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:

Score explanation: A score of 2 was awarded for the following content in the curriculum:

The personal interest project (PIP) in year 2 is a module which requires students to produce a written essay focusing on an essay topic from a list of given ideas. One essay idea focuses on the effects of reducing local temperatures in particular climates, and their effect on healthcare. Other essay topics also indirectly address the effects of worsening planetary health, including vulnerable migrant healthcare and global health topics. However, writing about these specific essay topics is not mandatory.

In Professional and Developmental Activities week (PDA) at the end of Year 3, students are able to engage with two environmental based workshops, as this was not the primary focus of the week however, it did not contribute to scoring.

There is an intercalation available in global health which allows the primary focus to be planetary health. This was paused during the COVID-19 pandemic but has now been reintroduced.

Curriculum: Health Effects of Climate Change

1.2. Does your medical school 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:

2

Score explanation: A score of 2 was given for the content covering this topic:

For year 1, a lecture was given on "Determinants of Health". This lecture includes some information on how environmental factors and living conditions affect human health, such as the effects of UV rays. Further, at the beginning of the year students are required to produce a presentation about the management of a number of emergency scenarios. Many but not all of these have an extreme weather factor including wildfires and cyclones.

# 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:

2

Score explanation: A score of 2 was given for the curriculum content below.

A lecture was given for Year 1 on the impact of air quality on respiratory health. It covered the effects of extreme weather events such as Saharan dust storms and agricultural fires on air pollution and its long term impacts, including on personal health. Furthermore, in the management of emergency situations presentations from Year 1, many extreme weather events were discussed which impacted individual health and health systems.

# 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 <b>not</b> covered. (0 points)	
Score Assigned:	2
Score Assigned:	2

Score explanation: A score of 2 was given for the curriculum content.

In one slide in a Year 2 antimicrobial lecture about changing climate, the cohort was taught about the increased use of antibiotics accelerating the effect of antimicrobial resistance.

In 1 lecture in Year 4, this was addressed in a local and global context, however as these were part of Academic Activities week, these are not necessarily core curriculum.

# 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:

2

Score explanation: A score of 3 was given for the curriculum content below.

A lecture given to Year 2 on the impact of air quality on respiratory health dealt with this topic in detail, covering the main long-term effects of air pollution on respiratory health including asthma and the loss of lung function.

In 1 lecture in Year 4, this was addressed in a local and global context, however as these were part of Academic Activities week, these are not necessarily core curriculum.

# 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:

0

*Score explanation:* A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5.

1.7. Does your <u>medical school</u> 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 <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)		
This topic was covered in <b>elective</b> coursework. (1 point)		
This topic was <b>not</b> covered. (0 points)		
Score Assigned:	0	
Score explanation: A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5.		

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?		
This topic was explored in depth by the core curriculum. (3 points)		
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)		
This topic was covered in <b>elective</b> coursework. (1 point)		
This topic was <b>not</b> covered. (0 points)		
Score Assigned:	0	
Score explanation: A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5.		

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 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 <b>not</b> covered. (0 points)	
Score Assigned:	2

Score explanation: A score of 2 was given for the curriculum content below.

One of the essay topics offered in the PIP project in year 2 dealt with the concept of migrant health, which may explore the effects of climate change on health. Another essay topic was centred around a place-based approach to public health, which could include references to communities of colour, indigenous communities, children, homeless populations and older adults.

Additionally, some lectures in the respiratory and sociological components of the Year 1 curriculum addressed the inordinate impact of changing planetary health on people with lower SES.

1.10. Does your <u>medical school</u> curriculum add climate change globally?	ress the unequal regional health impacts of	
This topic was explored in depth by the core curr	riculum. (3 points)	
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)		
This topic was covered in <b>elective</b> coursework. (1 point)		
This topic was <b>not</b> covered. (0 points)		
Score Assigned:	0	
Score explanation: A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5.		

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 <b>in depth</b> by the <b>core</b> curriculum. (3 points)		
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)		
This topic was covered in <b>elective</b> coursework. (1 point)		
This topic was <b>not</b> covered. (0 points)		
Score Assigned:	0	
Score explanation: A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5.		

# 1.12. Does your medical school 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: A score of 2 was given for the curriculum content below. A lecture given in Year 1 on the impact of air quality on respiratory health covered the impact of

industrial emissions in the Birmingham City area. Supplementary information on the local clean air

policies - including around hospitals and healthcare systems - was given.

1.13. To what extent does your <u>medical school</u> 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 <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)		
This topic was covered in <b>elective</b> coursework. (1 point)		
This topic was <b>not</b> covered. (0 points)		
Score Assigned:	0	
Score explanation: A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5.		

1.14. Does your <u>medical school</u> 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:	0
Score explanation: A score of 0 was given as this outcomes, lectures or small group teachings for years.	1

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: 0 Score explanation: A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5.

1.16. Does your <u>medical school</u> curriculum add systems?	ress the carbon footprint of healthcare	
This topic was explored <b>in depth</b> by the <b>core</b> curriculum. (3 points)		
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)		
This topic was covered in <b>elective</b> coursework. (1 point)		
This topic was <b>not</b> covered. (0 points)		
Score Assigned:	1	
Score explanation: A score of 1 was given for the curriculum content below.		
In the PIP project in Year 2, one of the essay topics available to be chosen was focused on sustainability and healthcare, exploring the impact of health systems 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 <b>and</b> environmental <b>co-benefits</b> of <b>avoiding</b> over-medicalisation, over-investigation and/or over-treatment (2 points)	0

The environmental impact of <b>pharmaceuticals</b> and over-prescribing as a cause of climate health harm. Alternatively teaching on <b>deprescribing</b> where possible and its environmental and health co-benefits would fulfil this metric. (2 points).	0
The health <b>and</b> environmental <b>co-benefits</b> of <b>non-pharmaceutical management</b> of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK. (1 point)	0
Environmental impact of <b>surgical</b> healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	0
The impact of <b>anaesthetic</b> gases on the healthcare carbon footprint and ways to reduce anaestheisa's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)	0
The impact of <b>inhalers</b> on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)	0
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)	0

*Score explanation:* A score of 0 was given as although many points above are covered in the curriculum, there is no mention of the environmental co-benefits.

Some of these points are also mentioned in some lectures as part of Year 4 academic activities week, but this is not the core curriculum and is not assessed.

#### Curriculum: Clinical Applications

# 1.18. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies to have conversations with patients about the health effects of climate change?

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)

0

Score Assigned:

Score explanation: A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5.

#### 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: A score of 2 was given for the curriculum content below.

Occupational health lectures in Year 2 cover the concept of an exposure history, and the effects of environmental workplace hazards on health. Students are taught the importance of asking about the patient's living conditions and occupation when taking a history.

We have awarded a score of 2 because the above matches the criteria of this point, however this content was not taught explicitly to include any concepts around global health or environmental sustainability.

#### 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?

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:

2

*Score explanation:* Although sustainability is currently being integrated into other courses across the institution (e.g. neuroscience, environmental health), there do not appear to be any improvements regarding ESH being made to the MBChB course thus far.

A MedSoc student group at UoB (Earth Resus Team) has made attempts to instigate this, with the addition of 2 standalone lectures in "Academic Activities" week, however these are not core curriculum.

# 1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> 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:

2

Score explanation: A score of 2 was given for the curriculum content below.

Two lectures on planetary health were given in Year 4, these did have formal learning outcomes. But, as they were student-organised and not core-curriculum, they do not meet the requirements of being integrated appropriately.

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?

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:

0

Score explanation: A score of 0 has been awarded as while there is an ambassador (Professor Chris McCabe) to comment on behalf of the medical school in sustainability meetings, there is no actual member to oversee the integration of planetary health and sustainable healthcare. There is a medical and dental school environmental and sustainability group composed of different faculty members who meet every two months to discuss sustainability at the University and Medical School.

Section Total (21 out of 72)

29.2%

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

*Score explanation:* There are researchers at the institution conducting research into planetary health. "Thriving Planet" is one of the University's research challenge themes and examples of research regarding this can be found here.

Information on the impact of the University's sustainability research can be found <u>here</u>. Information on the University's research into climate change and health can be found <u>here</u>.

Note - this is the same as last year (although the score has improved due to institution focus).

# 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 <b>no</b> dedicated department or institute. (0 p	points)	
Score Assigned:	3	
Score explanation: The Birmingham Institute for Sustainability and Climate Action (BISCA) is a dedicated institute for interdisciplinary planetary health research. This is the same as previous years.		
2.3. Is there a process by which communities d and environmental injustice give input or mak <u>institution</u> ?		
Yes, there is a process in which community members impacted by climate and environmental injustice have <b>decision-making power</b> in the climate + environmental research agenda. (3 points)		
Yes, there is a process in which community members impacted by climate and environmental injustice <b>advise</b> the climate + environmental research agenda. (2 points)		
<b>No</b> , but there are <b>current efforts</b> to establish a process for community members to advise or make decisions on the research agenda. (1 points)		
There is <b>no</b> process, and <b>no</b> efforts to create such a process. (0 points)		
Score Assigned:	0	
Score explanation: In the goals and objectives part of the BISCA page, it says "Co-create new research questions and find solutions by working in partnership with stakeholders (researchers, students, business, policy and decision makers, wider society) at local to global scales". Whether they're actually doing this is unclear however.		
2.4. Does your <u>institution</u> have a planetary hear research related to health and the environment		
There is an <b>easy-to-use</b> , <b>adequately comprehensive</b> website that <b>centralises</b> various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities. (3 points)		
There is a website that <b>attempts to centralise</b> various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive. (2 points)		
The <b>institution</b> has an <b>Office of Sustainability</b> whealth and the environment. (1 point)	vebsite that includes some resources related to	
There is <b>no</b> website. (0 points)		

3

Score Assigned:

Score explanation: As was the case last year, the University has several comprehensive and centralised websites providing resources related to health and environment. There is the overall climate change website and the BISCA (mentioned above) website. As with last year, these websites are not clearly linked to each other, however, they do provide all the above information.

\*\*Note that the <u>climate events section</u> of the website has not been updated since 2023.

# 2.5. Has your <u>institution</u> 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 / sustianable healthcare/vetcare in the past three years. (2 points)

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

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

Score Assigned:

4

#### Score explanation:

On the 17th of December 2024, the University held the <u>Research for Greener Surgery Conference</u> for the second year in a row.

The HeTa Research Institute at the University held the <u>World Sustainability Conference</u> 5.0 virtually on the 1st November 2024. The theme was "Navigating Change through Climate Action and Adaptation".

Other sustainability conferences:

- On the 25th of October 2024, the University held the <u>Sustainable Finance Conference</u> 2024. This is an annual conference held at the University.
- On the 7th and 8th of March 2024, the University held the <u>International Conference on</u> Sustainable Engineering Research Development & Sciences Innovation (SERDSI 2024).

# 2.6. Is your <u>institution</u> 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:	0	
Score explanation: No, the University is not a member of a planetary health organisation.		

Section Total (13 out of 17)	76.5%
------------------------------	-------

Back to Summary Page <u>here</u>

#### **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:

*Score explanation:* We have given a score of 3 as the institution (UoB) maintains a number of partnerships with community organisations with primary aims aligned to sustainability. Several courses also offer community outreach programmes at primary and secondary schools surrounding the topic of climate change and sustainability.

- The <u>Chemical Engineering outreach</u> programmes involve raising awareness at schools about renewable energy, while the <u>School of Biosciences</u> have created a mini lecture series 'The Trees in Time' which includes education on Greenhouse gasses, the role of forests in environmental health and how climate change affects soil nutrients. The outreach programme in the <u>school of Geography</u>, <u>Earth and Environmental Sciences</u> includes an exploration of the Earth Sciences Virtual tour for schools and classrooms. Students also visit schools as part of their curriculum to speak about earth and environmental sciences.
- The Birmingham Institute of Forest Research (BIFoR) has provided a free online learning platform for schools to educate children in KS3, 4 and 5 on the impact of climate change on the structure and function of forest ecosystems. This institute also offers volunteering opportunities to get involved with research and outreach events such as the ThinkTank.
- Organisations which the University has maintained include the Birmingham Energy Institute, which lead many projects and initiatives to improve the sustainability of the campus; the Tyseley Energy Park aimed to develop energy systems in Tyseley to reduce overall CO2 emissions. Furthermore, the Fraunhofer Joint Research Platform was launched as a collaborative platform to promote exchange of research staff and students to facilitate development of knowledge in various areas, including sustainability.

- The University is also part of the Green Impact programme, which supports environmentally and socially sustainable practice within organisations.
- Indirectly, the University Guild of Students includes numerous volunteer societies focused on both environmental and social health such as UoB Conservation Volunteers and UNICEF on campus.

## 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/medical school** has not offered such community-facing courses or events. (0 points)

Score Assigned:

0

Score explanation: A score of 0 was given as University of Birmingham has not held events or workshops relating to planetary health, with the exception of one event in 2019. There is some evidence of events by the Global Health Impact Hub, but this is not aimed at the community.

# 3.3. Does your <u>institution</u> have regular coverage of issues related to planetary health and/or sustainable healthcare in University update communications?

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

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

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

Score Assigned:

0

Score explanation: The University has achieved a score of 0 as mentions of sustainability are generally lacking, with occasional updates on campus sustainability and initiatives specific to the University. The only updates regarding planetary health or sustainable healthcare are announcements of specific events such as the Research for Greeneer Surgery Conference 2024.

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

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:

1

*Score explanation:* A score of 1 was given as the University Hospitals Birmingham Trust provides staff with a voluntary e-learning module on planetary health and sustainable practice. A group is currently working on piloting a teaching programme for the impacts of air pollution on public health for junior doctors and medical students.

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

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

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

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

Score Assigned:

0

*Score explanation:* A score of 0 was given as there is no evidence of patient educational materials regarding environmental health exposures.

# 3.6. Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about the health impacts of climate change?

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

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

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

Score Assigned:

0

Score explanation: A score of 0 was given as the Birmingham and Solihull ICB does not have educational materials linking the impact of climate change to human health. However, there is some information on their website regarding the "Greener NHS" scheme, and has links at the bottom of the page to resources and materials for patients about sustainability in the NHS.

Section Total (4 out of 14) 28.5%
-----------------------------------

Back to Summary Page <u>here</u>

#### **Support for Student-Led Planetary Health Initiatives**

<u>Section Overview:</u> 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 e	nacting a sust	ainability
initiative/OI project?				

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

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

No, **neither** the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects. (0 points)

Score Assigned:

*Score explanation:* A compulsory element of the fourth year curriculum is the completion of a QI project. These can be undertaken in any field of interest, including sustainability. They do not, however, have to be focused on sustainability, and the medical school does not offer grants for these.

1

NB This is the same as the previous year.

# 4.2. Does your <u>institution</u> 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: 2

*Score explanation:* The medical school offers <u>an intercalated degree in Global Health</u> which can be done after year 3 or 4 of the MBChB. Projects undertaken as part of this intercalation can cover planetary health. The Personal Interest Project is a student selected essay undertaken in second year

where students are able to select a supervisor for a greener healthcare project. The Year 4 conference poster is a student selected audit project and poster presentation and can be done on a planetary health topic.

NB This is the same as last year.

4.3. Does the <u>institution</u> 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 medical school, 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: 2

Score explanation: Applied Health Sciences at the University has a webpage on their Global Health research. This details the current research projects and who is involved in them, with links to contact details. They run the Global Health intercalation mentioned above, and this is referenced in the teaching section of the website.

NB This is the same as last year.

4.4. Does your <u>institution</u> 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 medical school dedicated to planetary health or sustainability in healthcare. (2 points)

Yes, there is a student organisation at my medical school 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: <u>Earth Resus Team</u> is a student organisation within the medical society at the University with a focus on sustainability within healthcare. With support from faculty they have

given a sustainability lecture during the year 4 academic activities weeks, and also arranged a sustainability option for the 3 week student selected experience placement undertaken in year 3.

# 4.5. Is there a student liaison representing sustainability interests who serves on a <u>department or institutional</u> 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:

1

*Score explanation:* Earth Resus Team is involved in curriculum reform. As above, they have arranged a sustainability SSE for the third year of the programme and give a sustainability lecture for the fourth year students.

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)	
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.	0
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

#### Score explanation:

<u>Grow with Joe</u> is a community garden on the University campus which is maintained by student and staff volunteers. The <u>University of Birmingham Conservation Volunteers</u> have also volunteered at the QE Hospital Community Garden.

The University's botanical garden, Winterbourne, also offers volunteering roles.

The Centre for Environmental Research and Justice offers a MSc, and the School of Geography, Earth and Environmental Sciences offer a module in Environmental Justice, although it is unclear whether this includes any interaction with the local community.

On the 19th November 2024, the University held a <u>screening</u> of two short films, And Breathe and Cultivate, which were screened at COP27 and COP28 respectively. These films use dance and film to explore the climate crisis. The screening was followed by a discussion panel of experts in film and sustainability.

<u>The Wayfarers Hiking Society</u> at the University organises hiking and mountaineering trips for members. The Birmingham Wilderness and Expedition Medicine Society is a medical school society that arranges hiking and backpacking expeditions.

Section Total (12 out of 15)	80%
------------------------------	-----

Back to Summary Page here

#### **Campus Sustainability**

<u>Section Overview:</u> 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 institution 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:

Score explanation: The score of 2 was given as the University has a large <u>team of staff</u> dedicated to sustainability and research regarding the campus' infrastructure. Each college has a sustainability lead, though these are not full-time positions and staff have other roles in the college. There is a lead for the Medical School, but not for the hospital, however, the Queen Elizabeth Hospital has its own sustainability lead.

2

#### 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/medical school does **not** meet any of the requirements listed above (0 points)

Score Assigned: 0

Score explanation: The University of Birmingham has an extensive <u>carbon management plan</u>, with plans to reach net zero within scopes 1 and 2 by 2035. However, they scored 0 as they plan on achieving carbon neutrality by 2045, not meeting any of the above requirements.

# 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:

0

*Score explanation:* A score of 0 was given as although the University is moving towards purchasing most energy from renewable sources, most buildings are powered by a mixture of renewable and non-renewable energy sources.

The "Smart Campus" initiative is a positive step towards a sustainable campus with net-zero emissions. More information is available at

https://www.birmingham.ac.uk/University/building/smart-campus/index.aspx.

# 5.4. Are sustainable building practices utilised for new and old buildings on the <u>institution's</u> 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 intitution's campus and the **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)

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

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

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

Score Assigned:

2

*Score explanation:* The University has received a score of 2 as the innovation of new buildings and the initiative of a 'Smart Campus' which aligns with the University's journey to Net Zero Carbon.

<u>The Birmingham Health Innovation Campus</u> is opening this year which is dedicated to sustainability and helps reduce energy consumption and emissions, while also supporting the development of green technologies.

Most of the buildings on campus are maintained in original states, with only a few being retrofitted to preserve energy, though this could be more extensive. It is also not transparent how much of the campus buildings are powered by renewable energy.

# 5.5. Has the <u>institution</u> 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 score of 2 was awarded due to the walkability of the campus between sites and accommodation with walking and cycle-friendly routes. It is also the only University in the UK to have its own train station, making it accessible by public transport, with several bus stops alongside campus.

The University also promotes the use of buses to free and discounted bus passes and has multiple bike lockers and shelters. It also has a provision for those cyclists to register their bikes and distribute free D-locks. For hospital placements at the medical school, the programme InPlace is used to coordinate carpooling.

# 5.6. Does your <u>institution</u> 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 medical school. (0 points)

Score Assigned:

2

*Score explanation:* There are accessible sites for recycling of all materials and a well established student-led <u>compost initiative</u> which is also easily accessible.

# 5.7. Does the <u>institution</u> 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

Score explanation: A score of 2 was given as the University has numerous policies to ensure sustainable sourcing of food, both locally and fair trade. The current road map focuses on food waste, ingredients, packaging, food miles/fairtrade and people. All food is certified by companies such as Red Tractor Milk, MSC certified seafood. However, the campus still serves red meat and has no 'Meatless Monday' or initiative to eat less meat.

# 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

Score explanation: A score of 3 was given, because based on the Sustainable procurement policy, the University of Birmingham applies sustainability criteria to its supply procurement decisions, including reducing carbon footprint, assessing environmental/social impacts, promoting waste hierarchy & circular economy principles, using Fairtrade products, fulfilling duty of care obligations, using ethical suppliers, and communicating the policy. The University also works with

the HE Sector and other purchasing consortia to ensure their Sustainable Procurement Policy is similar to their own.

NB This was taken from the 2023 PHRC as this has not changed.

#### 5.9. Are there sustainability requirements or guidelines for events hosted at the institution?

Every event hosted at the institution **must** abide by sustainability criteria. (2 points)

The institution **strongly recommends or incentivizes** sustainability measures, but they are **not required.** (1 point)

There are **no** sustainability guidelines for institution events. (0 points)

Score Assigned:

1

*Score explanation:* A score of 1 was given as there are initiatives for events to be run such as 'green conference packages', however, these are not mandatory guidelines for events.

# 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

Score explanation: The University has received awards regarding their progress in lab sustainability as part of the <u>Green Impact</u> programme. The <u>Leaf Scheme</u> and the new <u>Birmingham Health Innovation Campus</u> also encourage sustainable lab practices, as funding charities and organisations now require labs to be part of the Green Impact programme or green initiatives, all laboratories in Birmingham are partaking.

#### 5.11. Does your institution's 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:

Score explanation: A score of 2 was given as the University has significantly reduced their investment in fossil fuels to just <u>0.22%</u> of the University's Investment Assets as of November 2022 compared to 10% in 2018, however, have not fully divested as of yet.

2

### Section Total (18 out of 32) 56.3%

Back to Summary Page <u>here</u>

#### 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%
В	60% - 79%
С	40% - 59%
D	20% - 39%
F	0% - 19%

#### Planetary Health Grades for the University of Birmingham School of Medicine

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(21/72) \times 100 = 29.17\%$	D
Interdisciplinary Research (17.5%)	(13/17) x 100 = 76.5%	B+
Community Outreach and Advocacy (17.5%)	$(4/14) \times 100 = 28.5\%$	D
Support for Student-led Planetary Health Initiatives (17.5%)	(12/15) x 100= 80%	A-
Campus Sustainability (17.5%)	(18/32) x 100 = 56.3%	C+
Institutional Grade	(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 51.9%	C

#### **Report Card Trends**

#### **Section Overview**

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

#### PHRC Trends for University of Birmingham Medical School

