



Planetary Health Report Card (Pharmacy):

*University of Birmingham,
School of Pharmacy*



2024-2025 Contributing Team:

- Students: Hamza Sadaq, Nilima Nili
- Faculty Mentors: Bilkis Islam-Ali

*Primary Contact: Bilkis Islam-Ali (b.islam-ali@bham.ac.uk)

Summary of Findings

Overall Grade	C
Curriculum	D
<ul style="list-style-type: none"> The University of Birmingham's Pharmacy degree programme includes planetary health in its curriculum, but there is a lack of depth and breadth in teaching content. Sometimes when mentioned in teaching material, the content is minimal, often limited to just a few sentences on sustainability. Recommendations: The General Pharmaceutical Council (GPhC) has emphasised the need for better integration of environmental sustainability into MPharm curricula. Therefore, the teaching materials should be designed to meet the standards, with an expanded focus on sustainability practices. Teaching material to be further developed that integrates into current teaching. 	
Interdisciplinary Research	B+
<ul style="list-style-type: none"> The University of Birmingham hosts numerous conferences throughout the year addressing climate change; however, none are associated specifically with the School of Pharmacy. Recommendations: The School of Pharmacy can collaborate with other departments within the College of Medicine and Health (CMH) to organise a student-focused conference on climate change and sustainability. Additionally, the University should consider having a process for involving communities affected by climate change in their research agenda. They should also join and planetary health organisation. 	
Community Outreach and Advocacy	D
<ul style="list-style-type: none"> The University of Birmingham provides little opportunities for community outreach and advocacy. School of Pharmacy itself does not partner with any community organisations to promote planetary health. Recommendations: To seek opportunities to develop community outreach projects on planetary health within CMH and linking in with other non-medical faculties. 	
Support for Student-Led Initiatives	A-
<ul style="list-style-type: none"> The School of Pharmacy does offer opportunities for students to engage with planetary health projects such as with the Universitas 21 Global Healthcare challenge and summer internship programmes. However, uptake by students is limited. The University of Birmingham Medical School provides opportunities for students to conduct research in planetary health such as quality improvement projects or through an intercalated degree. Recommendations: The School of Pharmacy should aim to have more provisions for supporting student-led initiatives throughout the course of the pharmacy programme. Students should be encouraged to collaborate with societies such as Earth Resus. 	
Campus Sustainability	C+
<ul style="list-style-type: none"> The institution has robust plans to divest from fossil fuels and is currently in the initial phase of achieving the Net Zero commitment by 2040, aiming for neutrality by 2045. 	

- **Recommendations:** Greater efforts should be put in place to divest away from fossil fuels and moving towards more renewable energy sources and encouraging sustainable 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 school’s institutional priorities do not reflect the urgency of this danger to human health.

As future health professionals, we must be prepared to address the impacts of human-caused environmental changes on our patients’ health. This preparation is in the hands of the institutions providing our 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 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 school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term “planetary health” to satisfy the metric.
- **Sustainable Healthcare:** As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.
- **Education for Sustainable Healthcare (ESH):** is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
 1. Describe how the environment and human health interact at different levels.
 2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
 3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- **Pharmacy School/Department vs. Institution:** When “Pharmacy school” is specified in the report card, this only refers to curriculum and resources offered by the School/department of pharmacy 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 pharmacy 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 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 planetary health topics into the pharmacy school curriculum. Today's pharmacy students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that pharmacy students understand planetary health issues and principles.*

1.1 Does your pharmacy school 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
<p><i>Score explanation: This has been introduced as part of a new lecture on Sustainability to third year MPharm students. It was delivered as part of the Applied Professional Pharmacist Module 3 which is the module that applies and integrates learning from all Year 3 modules within the context of professional practice.</i></p> <p><i>The learning outcomes of the lecture were:</i></p> <ul style="list-style-type: none"> ● Define the term 'sustainability'. ● Apply principles of environmental sustainability to healthcare, pharmacy, and the NHS. ● Provide examples of how pharmacies can operate in a sustainable manner. <p><i>Each slides contained the following themes below:</i></p> <ul style="list-style-type: none"> ● What is Sustainability? ● Causes of Climate Emergency Human activities releasing greenhouse gases: Burning fossil fuels, Deforestation, Agriculture, Industrial processes, Waste management) ● Impact of the Climate Emergency (Rising global temperatures, Greenhouse gas emissions, Extreme weather events, Melting ice and rising sea levels, Impact on biodiversity) ● Health Impacts of Climate Change (Storms: Risk to life, Flooding: Mental health problems, Extreme Heat: Deaths, Air Pollution: Annual deaths) ● UN Sustainable Development Goals ● NHS Targets Towards Net Zero ● Environmental Sustainability & the NHS ● Principles of Sustainable Healthcare ● Sustainable Manufacturing (Green Chemistry, Biotechnology, Biodegradable Packaging, Sustainable Pharmacies) ● Sustainable Healthcare Initiatives (Use renewable energy sources, Modern, energy-efficient equipment and lighting, Turn off non-essential electricals, Use paper 	

rather than plastic bags, Efficient delivery routes and use of e-fuel, hybrid, or electric vehicles, Educate patients and staff)

- *Barriers to Sustainability*

1.2 Does your pharmacy school curriculum address the environmental impact of medicines in terms of their pollution, ecological impact and contamination of water 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: This has been introduced as part of a new lecture on Sustainability to third year MPharm students. It was delivered as part of the Applied Professional Pharmacist Module 3 which is the module that applies and integrates learning from all Year 3 modules within the context of professional practice.

Refer to 1.1

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1.3 Does your pharmacy school curriculum address the health effects of pharmaceutical industry- and manufacturing-related environmental toxins?

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 has been introduced as part of a new lecture on Sustainability to third year MPharm students. It was delivered as part of the Applied Professional Pharmacist Module 3 which is the module that applies and integrates learning from all Year 3 modules within the context of professional practice. Refer to 1.1

1.4. Does your pharmacy 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:

2

Score explanation: This has been introduced as part of a new lecture on Sustainability to third year MPharm students. It was delivered as part of the Applied Professional Pharmacist Module 3 which is the module that applies and integrates learning from all Year 3 modules within the context of professional practice. Refer to 1.1

1.5. Does your pharmacy school curriculum address the impact of climate change on the changing patterns of infectious diseases and increased antimicrobial resistance?

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: Insert explanation here. This aspect was not covered in the newly introduced lecture on sustainability.

1.6. Does your pharmacy school 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: This has been introduced as part of a new lecture on Sustainability to third year MPharm students. It was delivered as part of the Applied Professional Pharmacist Module 3 which is the module that applies and integrates learning from all Year 3 modules within the context of professional practice. See 1.1

1.7. Does your pharmacy school 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: Cardiovascular effects was not covered in the newly introduced lecture on sustainability.

1.8. Does your pharmacy school curriculum address the relationship between climate change and allergies?

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: In the first-year module titled "The Professional Pharmacist 1," it is recognised that environmental pollution can exacerbate allergies. However, the connection to climate change is not further explored or elaborated upon.

1.9. Does your pharmacy 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
<i>Score explanation: This has been introduced as part of a new lecture on Sustainability to third year MPharm students. It was delivered as part of the Applied Professional Pharmacist Module 3 which is the module that applies and integrates learning from all Year 3 modules within the context of professional practice. Refer to 1.1.</i>	

1.10. Does your pharmacy school curriculum address the unequal regional health impacts of climate change nationally and globally, including the impact of social inequality?	
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
<i>Score explanation: This is not currently covered in the MPharm curriculum.</i>	

1.11 Does your pharmacy school curriculum address the relationship between climate change and social determinants of health (e.g., reduced nutritional value of food)?	
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
<i>Score explanation: This is not currently covered in the MPharm curriculum.</i>	

1.12. Does your pharmacy school curriculum address the environmental and health co-benefits of a plant-based diet?	
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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
<i>Score explanation: This is not currently covered in the MPharm curriculum.</i>	

1.13. Does your pharmacy school curriculum cover these components of sustainable clinical practice? (1 point each)	Score
Waste production within the healthcare system and strategies for reducing waste in clinical activities such as single use plastic and packaging. (1 point)	1
Patient counselling on safe disposal of medications. For example, what can be disposed of and how to locate recycling schemes, in addition to certain drugs or drug classes that are most important to dispose of properly (e.g. hormonal contraceptives, drugs that are excreted unchanged/active metabolites). (1 point)	1
The impact of extreme heat, on patients on medications which can interfere with thermoregulation. (1 point)	1
The impact of anaesthetic gases on the healthcare carbon footprint. (1 point)	1
The environmental impact of pharmaceuticals and over-prescribing as a cause of climate health harm. Alternatively, teaching on de-prescribing where clinically appropriate and its environmental and health co-benefits would fulfil this metric. (1 point)	1
The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes for obesity. This is commonly known as social prescribing in the UK. (1 point)	1
The impact and benefits of benign by design pharmaceuticals through exploring medicinal chemistry concepts and/or discussing implications of excretion of active metabolites/unchanged drug products on ecological system. (1 point)	0
<i>Score explanation: Insert explanation here.</i> <i>In the third year, students attend a lecture on social prescribing, which provides insights into its concept, its role within the National Health Service, and the involvement of pharmacists in this practice. Throughout the MPharm course, students are taught appropriate waste disposal methods</i>	

and are expected to demonstrate proper disposal of clinical and pharmaceutical waste. Deprescribing is covered in a Polypharmacy lecture and patient case study. Additionally, all other sustainability-related themes are addressed in a newly introduced lecture on sustainability.

In the first-year module titled 'The Professional Pharmacist 1,' a lecture slide highlighted the financial waste resulting from medication non-adherence, providing specific values. However, the environmental impact of non-adherence was not addressed.

In the second-year module titled 'The Professional Pharmacist 2,' students learn about the safe disposal of medications. They are taught that controlled drugs should be returned by patients to the pharmacy for proper destruction.

1.14. Does your pharmacy school curriculum discuss the environmental implications of various dosage forms, medication delivery devices, and/or excipients?

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: In the second-year module titled 'Science of Medicines 2,' the environmental impacts of inhalers are acknowledged through a reference to NICE guidelines. This is covered in other modules during practical sessions in Applied Professional Pharmacist 2 & 3. However, the environmental impacts of other dosage forms are not discussed.

1.15. In training for patient communication, does your pharmacy school's curriculum introduce strategies for having conversations with patients about the health effects of climate change?

Yes, there are clear and detailed strategies introduced for having conversations with patients about climate change in the core curriculum (3 points)

Yes, having conversations with patients about climate change is briefly mentioned in the core curriculum. (2 points)

Yes, there are some examples of having conversations with patients about climate change in elective coursework. (1 point)

No, there are not strategies or examples for having conversations with patients about climate change (0 points)

Score Assigned:

0

Score explanation: This aspect is not currently a theme that's incorporated into the Communication Skills teaching.

1.16. Does your pharmacy school curriculum guide students to consider the environmental impact of medications as a factor in addition to safety, efficacy, cost, and pill burden when comparing equivalent therapies?

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: Throughout the MPharm course, discussions on patient adherence consistently highlight the financial and environmental impacts of non-adherence to medication. This is also covered during a lecture on Polypharmacy and Patient case study where deprescribing and reducing pill burden are discussed.

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

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

Yes, the 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: Research conducted by 4th-year undergraduate students (including completing this metric tool), has been used to inform the development of new teaching materials as part of the Applied Professional Pharmacist Module 3.

1.18. Does your pharmacy school have a member of faculty to incorporate planetary health and sustainable healthcare as a theme throughout the curriculum ?

Yes, there is/are a member(s) of faculty whose role is directly responsible for the incorporation of planetary health and sustainable healthcare as a theme throughout the curriculum (4 points)

Yes, there is/are member(s) of faculty who are incorporating planetary health and sustainable healthcare as a theme throughout the curriculum as well as doing their principle role (2 points)

There are no members of faculty who are incorporating planetary health and sustainable healthcare as a theme throughout the curriculum (0 points)	
Score Assigned:	2
<i>Score explanation: Dr Bilkis Islam-Ali is currently the Lead for Sustainability and together with other faculty members, making changes to integrate planetary health/sustainable healthcare into the curriculum.</i>	

1.19. Does your pharmacy school curriculum offer clinical practice experiences (for example, IPPE/APPE rotations in the U.S. or placement opportunities in the UK) that allow for the exploration of planetary health topics?	
There are multiple clinical practice experiences/placements that allow for direct exposure to planetary health topics. (3 points)	
There is one available clinical practice experience/placement that allows for direct exposure to planetary health topics. (2 points)	
There are available clinical practice experiences/placements that allow for indirect exposure to planetary health topics. (1 point)	
No, there are no such clinical practice experiences/placements available through the pharmacy school. (0 points)	
Score Assigned:	0
<i>Score explanation: This is not currently covered in the MPharm clinical placement.</i>	

1.20. Does your pharmacy school curriculum acknowledge a disparity in the effects of climate change? Specifically, does your curriculum address groups more vulnerable to environmental impacts, such as BIPOC, immigrant groups, low income populations, children, elderly, persons with disabilities, persons with pre-existing or chronic medical conditions?	
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
<i>Score explanation: This is not currently covered in the MPharm curriculum.</i>	

Section Total (25 out of 66)	38%
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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 institution?

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:

Researchers at the institution are actively engaged in planetary health studies. The "[Thriving Planet](#)" theme is one of the University's research challenges, with various examples of related research available. You can find information on the impact of the University's sustainability research [here](#), as well as details on their research into climate change and health [here](#).

At the School of Pharmacy within the University of Birmingham currently Dr Bilkis Islam-Ali is supervising a summer research project and 4th year research projects aiming to look at Pharmacy students' perceptions on the teaching of environmental sustainability on the new MPharm programme and completing the PHRC toolkit. Other sustainability and planetary health research is being undertaken within the wider institution at the University of Birmingham. Examples of some of these include the following:

Lab in the Woods

A project led by researcher Anna Gardner who investigated the effects of climate change on trees using a Free Air CO₂ Enrichment (FACE) facility in Staffordshire. She spent up to 12 to 13 hours per day up in the tree canopy of the facility in Staffordshire, collecting data from individual leaves on trees. The research aims to understand how increased carbon dioxide levels impact tree photosynthesis and canopy nitrogen use. This study is crucial for developing accurate vegetation models and understanding how forest ecosystems might respond to climate change.

<https://www.birmingham.ac.uk/research/centres-institutes/birmingham-institute-of-forest-research/bifor-face/face-facility>

100 Plastic River

Led by Professor Stefan Krause, this project tackles the global issue of microplastic pollution in freshwater ecosystems. The team have developed a toolkit for sampling water and sediments, creating a global database. The findings help identify impacts on freshwater ecosystems and food webs, providing valuable insights for managing and mitigating pollution.

<https://www.birmingham.ac.uk/research/water-sciences/projects/plastic-rivers>

Chair in Water Science

David Hannah is a Professor of Hydrology and College Director of Research for Life & Environmental Sciences at the University of Birmingham. He is the first chair for UNESCO to focus on the science of hydrology. His work focuses on protecting freshwater systems from pollution, climate change, and other threats. His efforts also include addressing water scarcity and poor sanitation issues, particularly in vulnerable populations.

<https://unesco.org.uk/chairs/chair-in-water-science-at-the-university-of-birmingham>

West Midlands Air Quality Improvement Programme

Led by William Bloss who aims to address air pollution in the West Midlands. The programme looks to understand pollution sources, predict air quality impacts, and assess the effectiveness of policy measures to improve public health and economic outcomes.

<https://www.birmingham.ac.uk/schools/gees/research/projects/wm-air#:~:text=Led%20by%20Willi,am%20Bloss%20of,impacts%20of%20potential%20policy%20measures.>

Green surgery key to reducing global healthcare carbon

The University of Birmingham, through the NIHR Global Health Research Unit on Global Surgery, is pioneering efforts to reduce the carbon footprint of the healthcare sector, particularly in operating theatres. Professor Angel Bhangu who is the Professor of Global Surgery at the University of Birmingham and a Consultant Colorectal Surgeon at University Hospital Birmingham, highlighted his achievements and goals during the Research for Greener Surgery Conference 2023. This event allowed the successful completion of the NHS's first documented 'net zero' surgery, which incorporated sustainable practices such as using reusable materials and alternative anaesthesia methods.

<https://www.birmingham.ac.uk/news/2024/green-surgery-key-to-reducing-global-healthcare-carbon>

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

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
<p><i>There is a dedicated institute for planetary health known as the Birmingham Institute for Sustainability and Climate Action (BISCA)</i> https://www.birmingham.ac.uk/research/bisca/home-page</p>	
<p><i>Score explanation: Insert explanation here.</i></p>	

<p>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 <u>institution</u>?</p>	
<p>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)</p>	
<p>Yes, there is a process in which community members impacted by climate and environmental injustice advise the climate + environmental research agenda. (2 points)</p>	
<p>No, but there are current efforts to establish a process for community members to advise or make decisions on the research agenda. (1 points)</p>	
<p>There is no process, and no efforts to create such a process. (0 points)</p>	
Score Assigned:	0
<p><i>Currently, this domain is not covered at UoB.</i></p>	

<p>2.4. Does your <u>institution</u> have a planetary health website that centralises ongoing and past research related to health and the environment?</p>	
<p>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)</p>	
<p>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)</p>	
<p>The institution has an Office of Sustainability website that includes some resources related to health and the environment. (1 point)</p>	
<p>There is no website. (0 points)</p>	
Score Assigned:	3
<p><i>The University of Birmingham has several websites aligned to sustainability. These include:</i> https://www.birmingham.ac.uk/university/social-responsibility-sustainability https://www.birmingham.ac.uk/research/bisca/home-page</p>	

<https://www.birmingham.ac.uk/research/climate/our-research>

However, these are individual websites that don't appear to be linked or signposted to each other.

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:

4

A list of some of the events the university has held within the past year:

On December 17, 2024, the University hosted the Research for Greener Surgery Conference for the second consecutive year.

World Sustainability Conference- November 1-2 2024

The University alongside the Green Institute and the HeTa Food Research Centre of excellence hosted this conference which explored the theme of "Harnessing the Intersection of Food, Water, and Energy for a Sustainable Future.

<https://greeninstitute.ng/wsc2024>

Sustainable Financial Innovation Centre Annual Conference- 29 November – 01 December 2024 in Dubai

The conference seeks to explore the impact of economic and geopolitical instability, such as high inflation, the Covid-19 pandemic, climate crisis, and the Russian invasion of Ukraine, on ESG (Environmental, Social, and Governance) investments. The conference also aims to discuss how the climate crisis affects business and investment strategies.

<https://www.birmingham.ac.uk/research/sfic/events/sustainable-financial-innovation-centre-annual-conference-2024>

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:

0

The pharmacy school or College of Medicine & Health is not a member of such an organisation

Section Total (13 out of 17)

76%

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Community Outreach and Advocacy

Section Overview: *This section evaluates an institutions 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 has participates in community focused events relating to planetary health. (1 point)	
No, there is no such meaningful community partnership. (0 points)	
Score Assigned:	3
<i>There is currently no clear indication to any partnerships promoting planetary and environmental health taking place.</i>	
<p><i>Score explanation:</i></p> <p><i>We have given a score of 3 as the University of Birmingham (UoB) maintains several partnerships with community organisations focused on sustainability. Many courses offer community outreach programs at primary and secondary schools on climate change and sustainability.</i></p> <p><i>The Chemical Engineering outreach programmess raise awareness about renewable energy, while the School of Biosciences has created a mini lecture series, "The Trees in Time," covering greenhouse gases, the role of forests, and the impact of climate change on soil nutrients. The School of Geography, Earth, and Environmental Sciences offers an Earth Sciences Virtual tour for schools, and students visit schools to discuss earth and environmental sciences.</i></p> <p><i>The Birmingham Institute of Forest Research (BIFoR) provides a free online learning platform for KS3, 4, and 5 students on the impact of climate change on forest ecosystems. BIFoR also offers volunteering opportunities for research and outreach events like the ThinkTank.</i></p> <p><i>The university maintains partnerships with organisations such as the Birmingham Energy Institute, which leads sustainability projects on campus, and the Tyseley Energy Park, which develops energy</i></p>	

systems to reduce CO2 emissions. The Fraunhofer Joint Research Platform promotes the exchange of research staff and students to advance knowledge in sustainability.

Additionally, the university participates in the Green Impact programme, supporting sustainable practices within organisations. The University Guild of Students includes volunteer societies focused on environmental and social health, such as UoB Conservation Volunteers and UNICEF on campus.

[School of Chemical Engineering Outreach - University of Birmingham](#)

[Outreach for Schools and Colleges - University of Birmingham](#)

[Outreach for Schools and Colleges - University of Birmingham](#)

[The Birmingham Institute of Forest Research \(BIFoR\) - University of Birmingham](#)

3.2. Does your **institution** 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** have not offered such community-facing courses or events. (0 points)

Score Assigned:

0

There are no such community-facing courses or events on planetary health.

Score explanation: Insert explanation here.

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:

0

All staff receive a weekly newsletter which contains a regular feature on sustainability projects and campus initiatives. Students also receive a newsletter but unsure if sustainability is included. However, as this is not a student led initiative, the score remains a zero.

Score explanation: Insert explanation here.

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:

1

A score of 1 was given because the main affiliated hospital trust, University Hospitals Birmingham, offers staff a voluntary e-learning module on planetary health and sustainable practice.

Score explanation: Insert explanation here.

3.5. Does your institution or its affiliated teaching hospitals 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

There are no educational materials for patients based at the affiliated teaching hospital.

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

Yes, the insttution or <u>all</u> 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
<i>There are no educational materials for patients based at the affiliated teaching hospital.</i>	

Section Total (4 out of 14)	29%
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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 <u>institution</u> 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
Score explanation: Undergraduate programmes within the College of Medicine & Health (e.g. Pharmacy, Medicine) offer elective and QI project opportunities. Students are free to choose their project titles which can include themes around sustainability and planetary health.	

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: As part of the Year 4 research projects, students had the opportunity to select project titles focused on integrating sustainability into the MPharm curriculum and exploring student perceptions of teaching environmental sustainability. Other projects were advertised but engagement was limited. Additionally, students can participate in the Universitas 21 Global Healthcare Challenge.	

Summer internships are available for undergraduates to work on short term projects during the summer break.

The medical school offers an [intercalated degree in Global Health](#), available after the 3rd or 4th year of the MBChB programme, with projects that can focus on planetary health. In the second year, students can undertake a Personal Interest Project, selecting a supervisor for a greener healthcare essay. Additionally, the Year 4 conference poster involves a student-selected audit project and presentation, which can also address planetary health topics.

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 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

There is no information related to this domain.

Score explanation: The Applied Health Sciences department at the University has a webpage dedicated to their Global Health research, detailing current projects and the researchers involved, along with contact information. They also offer the Global Health intercalation programme, which is mentioned in the teaching section of the website.
[Global Health - University of Birmingham](#)

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
<p><i>There is opportunity to become a sustainability champion where students can help drive sustainability initiatives by seeking opportunities aligned with the University's agenda and promote sustainable behaviours. Champions will act as a key contact for sustainability inquiries within their departments, disseminating information, and actively engaging in collaborative projects as part of the sustainability champions' network.</i></p> <p>https://www.birmingham.ac.uk/university/social-responsibility-sustainability/get-involved</p> <p><i>The Guild of Students also has a sustainability officer and many societies which focus on sustainability.</i></p> <p>https://www.guildofstudents.com/officerteam/suso/</p> <p><i>There is also the Earth Resus Team a student society founded by Medical Students</i></p> <p>https://birminghammedsoc.co.uk/group/earth-resus-team/</p> <p><i>Score explanation: Insert explanation here.</i></p>	

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
<p><i>There is the Earth Resus team which is involved in curriculum reform. This forthcoming year pharmacy students will be encouraged to participate.</i></p> <p><i>Score explanation: Insert explanation here.</i></p>	

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 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
<p><i>Grow with Joe is a community garden located on the University campus, maintained by student and staff volunteers. Additionally, the University of Birmingham Conservation Volunteers have contributed their efforts at the QE Hospital Community Garden. The University's botanical garden, Winterbourne, also provides opportunities for volunteering.</i></p> <p><i>The Centre for Environmental Research and Justice offers an MSc programme, while the School of Geography, Earth and Environmental Sciences provides a module in Environmental Justice. However, it is unclear if this module involves any engagement with the local community.</i></p> <p><i>On November 19, 2024, the University hosted a screening of two short films, <i>And Breathe</i> and <i>Cultivate</i>, which were previously shown at COP27 and COP28. These films utilise dance and film to address the climate crisis. The screening was followed by a panel discussion featuring experts in film and sustainability.</i></p> <p><i>The Wayfarers Hiking Society at the University organises hiking and mountaineering trips for its members. Similarly, the Birmingham Wilderness and Expedition Medicine Society, a medical school society, arranges hiking and backpacking expeditions.</i></p> <p><u>Grow with Joe - University of Birmingham</u> <u>Conservation Volunteers</u> <u>Volunteer with us</u> <u>The Centre for Environmental Research and Justice (CERJ) - University of Birmingham</u> <u>Environmental Justice - University of Birmingham</u> <u>Culture and Climate Change: 'And Breathe' and 'Cultivate'</u> <u>Wayfarers Hiking Society</u></p>	
Section Total (12 out of 15)	80%

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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:	2
<p><i>Here is a list of some of the members within the sustainability team:</i></p> <ul style="list-style-type: none"> <i>-Professor David Hannah who is the Deputy Pro-Vice-Chancellor For sustainability.</i> <i>- Professor Julia Myatt who is the Academic Director of Sustainability Education.</i> <i>- Dr Emily Prestwood who is the Energy Development Manager at Birmingham Energy Institute.</i> <i>- Jade Willets who is the Environmental Sustainability & Engagement Manager.</i> <p>https://www.birmingham.ac.uk/university/social-responsibility-sustainability/sustainability-staff</p>	

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:

1

The University of Birmingham is dedicated to reaching Net Zero Carbon Emissions for Scope 1 and 2 by 2035 and for Scope 3 by 2045

<https://www.birmingham.ac.uk/university/social-responsibility-sustainability/energy-and-carbon>
However, there is limited information as to how this will be achieved.

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

A score of 0 was assigned because, despite the university's efforts to purchase most of its energy from renewable sources, the majority of buildings are still powered by a combination of renewable and non-renewable energy.

The "Smart Campus" initiative represents a promising move towards achieving a sustainable campus with net-zero emissions. For more details, visit Smart Campus.

[Delivering the world's Smartest Campus - University of Birmingham](https://www.birmingham.ac.uk/university/building/smart-campus/journey-to-net-zero-carbon)

<https://www.birmingham.ac.uk/university/building/smart-campus/journey-to-net-zero-carbon>

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:	2
<p><i>The university's commitment to sustainability is embedded in its Strategic Framework 2030, which includes sustainability as one of its six key pillars. This framework ensures that all campus practices, including building design and construction, adhere to sustainable principles.</i></p> <p><i>The university also follows specific sustainability policies and strategies, such as the Carbon Management Plan and the Sustainable Procurement Policy</i> https://www.birmingham.ac.uk/university/social-responsibility-sustainability/sustainability-policy-and-strategy https://university-of-birmingham.foleon.com/bham2030/strategic-framework/sustainability</p>	

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
<p><i>University of Birmingham has implemented several strategies to encourage environmentally-friendly transportation options for students and reduce the environmental impact of commuting.</i></p> <p><i>The university's Sustainable Travel Action Plan aims to reduce the number of single-occupancy car commutes and promote the use of active travel and public transport. This includes initiatives such as Bus Season Ticket Scheme, Cycling Facilities Carpooling, & Walking Routes</i></p>	

<https://www.birmingham.ac.uk/documents/environment/uob-sustainable-travel-action-plan-july-2023.pdf>

It is the only university in the UK with its own train station, ensuring easy access via public transport. Additionally, there are several bus stops located around the campus.

Whilst these options are available, it is unclear if these are used by students and how well these are advertised.

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

There are recycling stations all over campus to recycle food, cans, paper and cardboard. Measures to reduce single use plastics/cups are promoted with “keep cups” advertised in restaurants and cafes.

<https://www.birmingham.ac.uk/university/social-responsibility-sustainability/sustainability-policy-and-strategy>

Score explanation: Insert explanation here.

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
<p><i>University of Birmingham applies sustainability criteria when making decisions about campus food and beverage selections. The university's commitment to sustainability is reflected in several key initiatives:</i></p> <p><i>Local Sourcing: The university prioritizes sourcing ingredients locally to reduce food miles and support local producers¹.</i></p> <p><i>Reduced Meat: They aim to make 50% of their menus plant-based, promoting healthier and more sustainable eating habits¹.</i></p> <p><i>Decreased Plastic Packaging: Efforts are made to reduce single-use plastic packaging across all food and beverage outlets¹.</i></p> <p><i>These initiatives are part of the university's broader strategy to achieve Net Zero Carbon by 2045 and are detailed in their Food, Beverage & Retail Sustainability Road Map</i></p> <p>https://www.birmingham.ac.uk/university/social-responsibility-sustainability/sustainable-food</p>	

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
<p><i>The university's Sustainable Procurement Policy ensures that environmental, social, and economic impacts are considered in all procurement activities</i></p> <p><i>Key aspects of this policy include:</i></p> <ul style="list-style-type: none"> • Environmental Impact: Prioritising products and services that minimize environmental harm and promote the principles of the circular economy. • Social Responsibility: Encouraging the use of ethical suppliers and supporting local, regional, and small to medium-sized enterprises (SMEs). • Economic Considerations: Evaluating the whole life cost of products and services to ensure best value for money. <p><i>The university holds accreditations such as the Flexible Framework Level 5 and Procurement Maturity Assessment Superior Status, reflecting its commitment to sustainable procurement practices</i></p> <p>https://www.birmingham.ac.uk/documents/university/environment/sustainable-procurement-policy-pdf.pdf</p>	

<https://www.birmingham.ac.uk/university/social-responsibility-sustainability/sustainable-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

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.

Score explanation: Insert explanation here.

5.10. Does your institution 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

The University of Birmingham participates in the Laboratory Efficiency Assessment Framework (LEAF) initiative to enhance the sustainability and efficiency of laboratory operations. Other initiatives include the Green Labs Programme, which promotes sustainable practices, the Smart Campus Plan in partnership with Siemens to improve energy efficiency and reduce CO2 emissions, and the School of Chemistry's focus on sustainable practices. Additionally, the university encourages participation in the Green Impact programme to prepare for the upcoming sustainable labs scheme. However, these are voluntary to sign-up to. The new Birmingham Health Innovation Campus also encourage sustainable lab practices.

<https://www.birmingham.ac.uk/university/social-responsibility-sustainability>

<https://www.birmingham.ac.uk/university/social-responsibility-sustainability/sustainability-policy-and-strategy>

[Birmingham cohort achieves awards for sustainability – lifETIME CDT](#)

[Birmingham Health Innovation Campus - University of Birmingham](#)

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
<p><i>The University has a Responsible Investment Policy and has reduced investments in fossil fuels from 10% in 2018 to less than 0.5% in 2021 and just 0.22% in 2023.</i></p> <p>https://www.birmingham.ac.uk/documents/university/environment/responsible-investment-policy.docx</p>	
Score explanation: Insert explanation here.	
Section Total (19 out of 32)	
59%	

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Grading

Section Overview

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

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

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

Planetary Health Grades for the University of Birmingham School of Pharmacy

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(25/66) \times 100 = 38\%$	D
Interdisciplinary Research (17.5%)	$(13/17) \times 100 = 76\%$	B+
Community Outreach and Advocacy (17.5%)	$(4/14) \times 100 = 29\%$	D
Support for Student-led Planetary Health Initiatives (17.5%)	$(12/15) \times 100 = 80\%$	A-
Campus Sustainability (17.5%)	$(19/32) \times 100 = 59\%$	C+
Institutional Grade	$(A \times 0.3 + B \times 0.175 + C \times 0.175 + D \times 0.175 + E \times 0.175) = 54.14\%$	C