

Planetary Health Report Card (Pharmacy):

University of Portsmouth



2024-2025 Contributing Team:

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Summary of Findings

Overall Grade C-

Curriculum C-

University of Portsmouth has implemented some elements of sustainable healthcare and planetary health topics throughout the curriculum, within lecture material and workshops but there is room for further improvement. **Recommendations:** Enhanced integration of planetary health into the University of Portsmouth's Pharmacy curriculum by incorporating more education on the effects of climate change on health would enable clearer connections between human health and climate change.

Interdisciplinary Research

D+

Whilst there is a department that is dedicated to the research of Planetary Health within the institution, there is not one dedicated to the School of Pharmacy and Biomedical Sciences.

Recommendations: Introducing collaborations between the School of Pharmacy and the Environmental Processes and Impacts Research Department discussing the effects that Planetary Health has on healthcare, namely the pharmacy industry, through initiatives such as conferences and joint focused research.

Community Outreach and Advocacy

C-

The University of Portsmouth has successfully partnered with community organisations and offered community-facing events focused on planetary health.

Recommendations: Provide educational materials to educate patients on the health impacts of climate change and sustainable healthcare. Additionally, introduce regular communications to educate students on planetary health and sustainable healthcare.

Support for Student-Led Initiatives

C-

The University of Portsmouth has supported sustainability initiatives by funding undergraduate projects and engaging students in leading Green Week events to promote environmental awareness and sustainable practices. **Recommendations:** To improve, establish a dedicated webpage for planetary health and sustainable healthcare activities with mentor contacts. Introduce a student liaison for sustainability on decision-making committees.

Campus Sustainability

B-

University of Portsmouth Pharmacy School has made good progress to become a more sustainable campus in conjunction with the wider university campus, including divesting from fossil fuels, implementing strategies to provide environmentally-friendly transportation and setting achievable goals for carbon neutrality by 2030. **Recommendation:** While there are good practices in place, campus sustainability can be improved through formal plans to make the lab spaces more environmentally sustainable, encouraging sustainable practices to be utilised for new and old buildings on campus and introducing sustainable guidelines for events and procurement.

Statement of Purpose

Planetary health is human health.

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

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

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

Definitions & Other Considerations

Definitions:

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

<u>Section Overview:</u> 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:	0	
Score explanation: After screening content from 23/24 across all academic years we couldn't find anything that addressed the impacts of extreme weather		

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:	3	
Score explanation:		

The impact of medicines on air quality was introduced in Year 2 during the 'Promoting Public Health' lecture. In Year 1, the lab manual addressed the safe disposal of chemicals and their effects on water systems. Additionally, workshops have explored the environmental impacts of inhalers and medicines waste.

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:

Score explanation:

The University of Portsmouth Pharmacy curriculum covers key safety and handling practices across multiple years. In Year 3, the Radiopharmacy Review addresses hazards and safety protocols, while the Molecules to Medicines lecture in Year 1 explores factors influencing packaging decisions. The Year 3 Cytotoxic Drugs lecture focuses on the safe preparation and handling of cytotoxic drugs, and infectious disease management, including antimicrobial guidelines, is also covered. Additionally, the curriculum emphasizes COSHH (Control of Substances Hazardous to Health) regulations, focusing on hazardous substances and their impact on individuals and the environment. These topics provide students with a comprehensive understanding of pharmaceutical safety and regulatory practices.

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:	0	
Score explanation: Looking through the 23/24 curriculum for all years we could not find anything		

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)

that addressed carbon footprint of healthcare system

This topic was not covered. (0 points)	
Score Assigned:	0

Score explanation: Looking through the 23/24 curriculum for all years we could not find anything that addressed the impact of climate change on changing patterns of infectious diseases and increased antimicrobial resistance.

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:

Score explanation: This topic was addressed in Year 4 within therapeutic frameworks for COPD, where students researched and were assessed on epidemiology. It was also covered in Year 2 during Respiratory Physiology Lecture 9, which discussed environmental factors like indoor and outdoor air pollution.

2

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:

Looking through the 23/24 curriculum for all years we could not find anything that addressed the cardiovascular health effects of climate change, including increased heat.

0

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: Looking through the 23/24 curriculum for all years we could not find anything that addressed the relationship between climate change and allergies		

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)

Looking through the 23/24 curriculum for all years we could not find anything that addressed the mental health and neuropsychological effects of environmental degradation and climate change.

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

Looking through the 23/24 curriculum for all years we could not find anything that addressed this. There is no elective coursework in the school of pharmacy at the University of Portsmouth. There is some material covering social inequality but not related to climate change.

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:	2	
MECC (Making Every Connection Count) training, a mandatory workshop, in year two and four 23/24, covers climate change and social determinants of health.		

1.12. Does your pharmacy 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: Looking through the 23/24 curriculum for all years we could not find anything that addressed this. There is no elective coursework in the school of pharmacy at the University of Portsmouth.

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)	0
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)	0
The impact of anaesthetic gases on the healthcare carbon footprint. (1 point)	0

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)	0
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

Score explanation:

Year 2 students are required to do health promotion campaign group presentations where some non-pharmacological treatments were considered for some of the titles given to students. Year two students are also required to do a Practical Skills Assessment, where they are assessed on a patient consultation. In this consultation, students are required to calculate the patient's QRISK score, and then offer advice on better lifestyle choices, including diet, exercise, smoking and referring patients to NHS services such as "Couch to 5K". Prior to this exam, students engage in several workshops where the benefits of non-pharmacological treatments and lifestyle are discussed and how to implement these in patient consultations.

Year 4 students are taught about non-pharmacological treatments such as lifestyle changes, counselling and behavioural therapies, as well as other forms of social prescribing. These topics are also covered in workshops where medicines optimisation is taught. Therapeutic Frameworks are also required to be completed by all year 4 students, where non-pharmacological treatments are considered for some of the conditions in these therapeutic frameworks.

Year 4 students are also taught about pharmaceutical waste, in reference to the Medicines, Ethics and Practice. Students are required to study waste medicines and destruction of controlled drugs, in line with local policies. This equips fourth year pharmacy students with the overall knowledge of guidelines relating to separation of medicines from general waste, any steps that need to be taken for specific medications and devices, and what licenses are retained by pharmacies.

https://www.rpharms.com/mep/3-underpinning-knowledge-legislation-and-professional-issues/37-additional-legal-and-professional-issues/372-waste-medicines#gsc.tab=0

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: Insert explanation here.

This is covered in year 4 Therapeutic Framework on COPD, focusing on the most environmentally friendly methods for delivering inhaled medications. It is also covered in year 3 advanced formulations on advanced drug delivery which looks at the environmental impact of numerous dosage forms.

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: 2

Score explanation:

Throughout the curriculum, there are a number of workshops which involve patient discussion around health effects of climate change. This is covered in patient centred consultations in the first year and then medication optimisation workshops which cover safety netting and advising patients to look after themselves during heatwaves.

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:	3
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Score explanation:

The asthma workshop for fourth years considers environmental impact when prescribing in addition to other factors. In one scenario, a patient returns an inhaler due to environmental concerns, promoting discussions of environmentally friendly alternatives, when considering the treatment choice.

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: 4

Score explanation:

Learning Objectives for sustainability and IPE activity for years 1-4 in the process of implementing for future years. Acknowledging climate impact in taught curriculum in therapy choices, patient discussion and specific IPE workshops across the 4 year programme

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

Score explanation:

The School of Pharmacy has also taken steps to ensure that planetary health and sustainable healthcare is incorporated into the curriculum. There are interprofessional education workshops that are to be completed by students, throughout the four years. There are currently changes being made to include the impact of climate change, and its importance within these workshops. A

member of faculty at the School of Pharmacy has also worked on an individual basis to incorporate teaching on planetary health, through a clinical audit carried out by students.

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:

Score explanation:

Clinical placements are conducted in year 3 and 4 starting with 10 weeks and increased to 16 weeks. This increases chances of exploring planetary health topics as it is carried out in different settings such as GP, hospital and community, allowing students to put in practice learning about the environment. A number of audits were conducted last year related to medicines disposal and environmental impacts, clinical practice audits, community pharmacy surveys and analysis looking at medicines waste. These are the titles of the audits carried out last year:

2

- Patients' views and behaviours in relation to asthma inhalers use and their impact on environmental sustainability: a cross-sectional survey study
- The public's perceptions and behaviours towards household disposal of medicines and its effect on the environment: a cross-sectional survey study

https://researchportal.port.ac.uk/en/persons/helena-herrera/publications/

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	0	
Score explanation: Looking through the 23/24 curriculum for all years we could not find anything that addressed this. There is no elective coursework in the school of pharmacy at the University of Portsmouth.		

Section Total (27 out of 66)	40.91%
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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 <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)

1

Score Assigned:

Score explanation:

The University of Portsmouth has a department dedicated to researching sustainability and the environment which has many projects dedicated to improving sustainability practices throughout the school. However, whilst they are undertaking a lot of research into many different areas, there aren't any researchers specifically dedicated to healthcare, vet care or the School of Pharmacy. https://www.port.ac.uk/research/themes/sustainability-and-the-environment

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

There is **at least one** dedicated department or institute for interdisciplinary planetary health research. (3 points)

There is **not currently** a department or institute for interdisciplinary planetary health research, but there are **plans** to open one in the next 3 years. (2 points)

There is an **Occupational and Environmental Health department**, but no interdisciplinary department or institute for planetary health research. (1 points)

There is **no** dedicated department or institute. (0 points)

Score Assigned:

3

Score explanation:

At the University of Portsmouth, there is a department dedicated to research for planetary health, that promotes interdisciplinary research, including the Microplastics Research Group, the Centre for Enzyme Innovation and the Environmental Processes and Impacts Research Group. The University of Portsmouth also works with organisations in sustainable management that are currently working to try and meet the growing demands for food and energy in the population. https://www.port.ac.uk/research/research-groups-and-centres/environmental-processes-and-impacts-research-group

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

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

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

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

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

Score Assigned: 0

Score explanation:

There is no process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at our institution

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

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

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

The institution has an Office of Sustainability website that includes some resources related to health and the environment. (1 point)			
There is no website. (0 points)			
Score Assigned: 2			
Score explanation: The University of Portsmouth has a website with many resources that relates to sustainability, the environment and the research that has been carried out at the university. Whilst the university updates this website, it is not frequent, and only discusses research and initiatives that students can follow. There is no promotion of events that students and faculty can attend, or information on funding opportunities or mention of leaders involved in planetary health at the university. More information can be found here: https://www.port.ac.uk/about-us/our-ambition/sustainability			
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 / 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: 0			

Score explanation:

The institution has not recently hosted a conference or symposium on topics related to planetary health.

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:

The institution is not a member of a national or international planetary health or ESH/ESV organisation. Overall, this metric scores Zero, however this PHRC current initiative is taking place.

Section Total (6 out of 17)	35.29%
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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 environmental 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 participating in community focused events relating to planetary health. (1 point)

No, there is **no** such meaningful community partnership. (0 points)

Score Assigned:

Score explanation: The University of Portsmouth's climate and health partnerships webpage highlights the AIR pollution interdisciplinary research (AIR) network, which brings together a global team from the UK, Kenya and Sweden. Its long-term aim is to create innovative, participatory solutions to reduce air pollution and its impact on health in low-resource Sub-Saharan African communities, focusing on raising awareness and decreasing exposure to particulate matter (PM).

The University has also partnered with Liverpool School of Tropical Medicine and the Kenya Medical Research Institute on the Tupmue project, a three-year study investigating the prevalence of lung issues among children in two Nairobi areas. Funded by the MRC, NRF, and the wellcome Trust Public Engagement Award in 2020, the project raises awareness of air quality issues though creative methods like song, theatre, and visual arts, benefiting the health and wellbeing of Nairobi residents. More information can be found here:

https://www.port.ac.uk/collaborate/our-partnerships/health-partnerships/climate-and-health-partnerships

In 2022, Portsmouth Hospitals University (PHU) has published their first Green Plan, outlining the actions it will take over the next three years to address the challenge of coming part of the first net-zero carbon healthcare system and reducing carbon emissions. The PHU is collaborating with local partners including the University of Portsmouth and Portsmouth City Council. More information can be found here:

https://www.porthosp.nhs.uk/about-us/improving-our-sites/climate-change-and-sustainability

The University of Portsmouth runs the Portsmouth Climate Festival in collaboration with the City Council. https://www.port.ac.uk/about-us/our-ambition/sustainability#research In the University's financial report for the year ended July 31 2022, it states that their Greentech South team is working to support Small and Medium Sized Enterprises in reducing carbon emissions and facilitating the move towards a zero-carbon economy. Climate change and green infrastructure; clean water and sanitation; the impact of plastics and pharmaceuticals; low carbon design; ecological systems and biodiversity. More information can be found here: https://publications.docstore.port.ac.uk/A1013026.pdf

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

Score Assigned:

3

Score explanation: The University hosted the Clean Maritime Portsmouth event for COP-28. It hosts an event yearly to align with COP events. Further information can be found here: https://www.port.ac.uk/news-events-and-blogs/news/university-hosts-clean-maritime-portsmouth-event-for-cop28

The University of Portsmouth ran a community facing event through the Portsmouth Climate Festival in collaboration with the City Council. It brought together organisations and communities across the city in a range of special events to explore issues related to the four main goals of COP26:

- Secure global net zero by mid-century and keep 1.5 degrees within reach
- Adapt to protect communities and natural habitats
- Mobilise finance for climate action
- Work together to rise to the challenges of the climate crisis

This was delivered through a number of events both in person and online for all age groups. More information can be found here:

https://www.port.ac.uk/news-events-and-blogs/news/portsmouth-climate-festival

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: No points were awarded as there are no regular communications received by students about planetary health or sustainable healthcare. Looking at previous emails, emails about green week 2024 informing students of events related were received by students on 17th April 2024 and 22nd April 2024. In addition, the University covers some topics related to planetary health on their website. https://www.port.ac.uk/news-events-and-blogs/news https://www.port.ac.uk/about-us/our-ambition/sustainability#research

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:

(

Score explanation: No points were awarded because the resources provided to pharmacy students post-graduation do not include topics on planetary health and sustainable healthcare. However, the postgraduate prescribing course for nurses and pharmacists does include a session on sustainable prescribing.

Additionally, the Portsmouth University Hospitals NHS Trust has outlined strategic actions in their Green Plan to promote climate awareness, encourage sustainable resource use among staff, and support the implementation of sustainable care models. More information can be read here:https://www.porthosp.nhs.uk/application/files/3117/1146/7455/PHU Green Plan.pdf

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 <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 medical centres have accessible educational materials for patients. (0 points)

Score Assigned:

0

Score explanation: No points were awarded as there are no accessible educational materials targeting patients on environmental health exposures could be identified.

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 **medical school** 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

Score explanation: No points were awarded as the health impacts of climate change are not explicitly mentioned. However, Portsmouth Hospitals University NHS Trust is leading a scheme to raise awareness about reusing refurbished walking aids instead of new ones to reduce carbon emissions. The initiative includes adding stickers to walking aids to highlight nearby recycling points.

https://www.porthosp.nhs.uk/coming-phu/patients-and-visitors/walking-aid-recycle-scheme

Section Total (6 out of 14)	42.86%
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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.

Links:

https://www.port.ac.uk/news-events-and-blogs/portsmouth-student-attending-un-meetings-to-negotiate-e-a-new-global-law-on-plastic-pollution

4.1. Does your <u>institution</u> offer support for students interested in enacting a sustainability initiative/QI 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)

2

Score Assigned:

Score explanation: Insert explanation here.

The University of Portsmouth supported the PhD project, Universities as Transformative Sustainability Leaders, by creating an environment that promotes sustainability awareness, placing students at the center of this student-led initiative by fully funding it. This scholarship covers tuition fees, and the annual maintenance loan for students.

 $\underline{https://www.port.ac.uk/study/postgraduate-research/research-degrees/phd/explore-our-projects/universities-as-transformative-sustainability-leaders}$

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:

Score explanation:

A former student, under the supervision of a member of faculty, conducted their 4th Year project focusing on the environmental impact of pharmaceuticals and medical devices, as well as students' interest in learning about this issue. They developed a survey distributed among Pharmacy students across various year groups (including Years 2 and 3) to explore their perceptions and educational needs regarding the environmental impact of pharmaceuticals and medical devices. This project was titled: The impact of pharmaceuticals on the environment: global attitudes and learning needs in healthcare students.

2

Furthermore, The University of Portsmouth's PhD project, *Universities as Transformative Sustainability Leaders*, was fully funded and offered students the chance to conduct research focusing on developing evidence-based solutions to enhance Portsmouth's sustainability. https://www.port.ac.uk/study/postgraduate-research/research-degrees/phd/explore-our-projects/universities-as-transformative-sustainability-leaders

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: 0

Score explanation: The University of Portsmouth website provides information on sustainability policies within the University of Portsmouth in a section about the university's ambitions. While the university website includes links to current initiatives, which may be difficult to access through the main university page, there is no dedicated website specifically focused on planetary health/sustainable healthcare, making it insufficient to score a point.

https://www.port.ac.uk/about-us/our-ambition/sustainability

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:

0

Score explanation:

There is a team of staff and students that drive sustainability work at the union and work in partnership with the university staff, which bring events such as green week. However this is separate to the institution.

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:

0

Score explanation: No points were awarded as the university does not have such a student representative.

4.6. In the past year, has the <u>institution</u> had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	Score
Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.	0
Panels, speaker series, or similar events related to planetary health that have students as an intended audience.	0
Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.	1
Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	1

Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	0
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	0

Score explanation: The university of Portsmouth organised an interactive event where students can learn from local environment experts and artists about climate change and cultural expression. Through discussions, workshops, and creative showcases. For more information check the links.

Portsmouth Climate Action group, climate festival + green week

https://www.port.ac.uk/news-events-and-blogs/news/portsmouth-climate-festival

https://www.port.ac.uk/research/research-groups-and-centres/foodciti

https://www.portsmouth.co.uk/education/university-of-portsmouth-scientists-develop-new-farming-techniques-to-improve-global-food-production-2990065

https://www.port.ac.uk/news-events-and-blogs/news/scientists-help-reboot-50-years-of-plant-advic

Section Total (6 out of 15)	40.00%
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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 <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

Score explanation:

The University of Portsmouth has a senior disability management team consisting of a Deputy Vice-Chancellor (Education), chairs the University's Sustainability Strategic Delivery Group in collaboration with the Director of Estates and Campus Services and the Director of the Sustainability and the Environment research theme.

The Sustainability staff include the Energy and Environment Team which consists of two professionals with a remit that covers sustainable travel, carbon management, environmental legislation compliance systems, energy, water and waste contracts, and associated budget and invoice management. The team includes a Energy, Environment Manager and a Sustainability Co-ordinator The team cover operational sustainability project improvements in the region of £200,000 annually. There are a further eight staff and an external Advisory Council engaged with our Revolution Plastics initiative, which aims to find solutions to global plastic pollution. https://www.port.ac.uk/about-us/our-ambition/sustainability

5.2. How ambitious is your institution's 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:

5

Score explanation: The University of Portsmouth is committed to becoming climate positive by 2030, they've reduced carbon emissions by 50% since 2009 with a climate policy in place to achieve the targets set out for 2030. The climate positive sustainability policy looks at factors such as carbon reduction, education for sustainable development and environmental sustainability to name a few.

More information can be found here regarding the policy and plans:

https://policies.docstore.port.ac.uk/policy-025.pdf

https://www.port.ac.uk/news-events-and-blogs/blogs/protecting-our-environment/becoming-a-climate-positive-university)

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:

1

Score explanation: The University of Portsmouth currently has 100% renewable electricity with aims to achieve outstanding rating for sustainable design from BREEAM. More information can be found here: https://policies.docstore.port.ac.uk/policy-025.pdf

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 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

Score explanation: The University of Portsmouth has embraced sustainable building practices in the construction of new campus facilities. For instance, the Ravelin Sports Centre is a low-carbon building that has earned the highest BREEAM design rating, 'Outstanding,' for its exceptional commitment to sustainable design. However, several older buildings on campus have not been retrofitted, and some do not meet modern sustainability standards. More information can be found here https://publications.docstore.port.ac.uk/A1013026.pdf
https://www.port.ac.uk/about-us/our-ambition/building-our-future

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: University of Portsmouth has implemented strategies to encourage and provide environmentally-friendly transportation options, for example, by offering advice to sustainable travel on campus including a free term time bus service as part of the University's Travel Plan. The university campus location is in the city centre and is not amenable to unsustainable forms of transportation by default, instead, it is designed to encourage walking and cycling as the primary means of getting around. More information can be found here

https://www.port.ac.uk/about-us/our-ambition/sustainability#research https://policies.docstore.port.ac.uk/policy-010.pdf

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: The University of Portsmouth's buildings all have multiple waste bins located around campus for rubbish, recycling and composting, increasing the recycling rate from 40% to 70% since 2011. These buildings are accessed by students and faculty and the 4-in-1 waste bins are placed near cafes, dining halls, hallways outside of lecture theatres and laboratories and near entrances of buildings all around campus. Any non-recyclable items are extracted, then waste material is sorted and processed via their materials recycling facility near Bristol. The separated waste is managed by different means, food waste is anaerobically digested while general waste goes to a waste-to-energy plant. More information can be found here:

https://www.port.ac.uk/about-us/our-ambition/sustainability#research https://myport.port.ac.uk/life-at-uni/life-on-campus/sustainability/recycling-in-portsmouth

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 a**dequate** 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: The University of Portsmouth follows sustainable guidelines for food and beverages, although these are not mandatory. Nonetheless, the university is committed to improving local food sourcing and expanding its vegetarian and vegan options. In fact, approximately 40% of the menu is plant-based, and a loyalty program has been introduced to encourage students to explore these healthier choices. Ingredients are sourced locally to minimise transport-related emissions, and organic produce is used whenever possible. For more details, you can find further information here

 $\frac{\text{https://myport.port.ac.uk/life-at-uni/life-on-campus/sustainability/eating-green\#:} \sim : text = Our\%20ca \\ mpus\%20cafes\%20make\%20it\%20easy\%20to\%20eat, country.\%20Around\%2040\%25\%20of\%20o \\ ur\%20menu\%20is\%20plant-based$

 $\frac{https://myport.port.ac.uk/news-events-and-blogs/blogs/portsmouth-is-in-the-top-10-most-vegan-friendly-universities}{(a.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)}{(b.m.)$

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:

0

Score explanation: Currently the University of Portsmouth does not have sustainable procurement policies however the university has identified procurement as a significant contributor to total emissions. As part of the climate positive policies for carbon reduction, sustainable procurement policy has become a key priority in the University of Portsmouth's efforts to become climate positive by 2030.

https://policies.docstore.port.ac.uk/policy-025.pdf

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:

0

Score explanation: Looking through our University policy, we could not find specific sustainability criteria related to events hosted at the institution.

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)

0

Score explanation: An Associate Professor in Cell and Molecular Biology at the School of Pharmacy and Biomedical Sciences had been looking at improving the sustainability of laboratory practices and resources. The institution had joined a year long LEAF membership, a framework that guides and informs laboratories to consider multiple different factors that impact the sustainability of a laboratory. The institution is currently reconsidering joining again. However, they have stated that they have gained a lot of knowledge from this membership, and will continue to work towards a more sustainable laboratory. An important change they have made is that the plastics used in the laboratory are recycled by an external contractor that specialises in this procedure. The laboratory also purchases disposable plastics that have been made from biofuels. This does not qualify for the points as it is only relevant to the School of Pharmacy.

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:

4

Score explanation: The University of Portsmouth has announced its divestment from fossil fuels as part of an update to its Ethical Investment Policy, which now excludes all investments in the fossil fuel industry. The University's Ethical and Sustainable Investment Statement emphasizes its commitment to investing in companies that align with the United Nations Sustainable Development Goals (SDGs). Specifically, the University seeks to support businesses with policies that prioritize environmental protection and those engaged in the development of environmental technologies. Additionally, the Statement outlines that companies without published plans for addressing climate change or reducing plastic waste are deemed unsuitable for investment. The University is committed to making investments that contribute to the achievement of the United Nations 2030 Agenda for Sustainable Development and the SDGs. In particular, the University will prioritize investments in organizations and countries that demonstrate:

- 1. Robust policies and controls to protect the environment, prevent biodiversity loss, and safeguard habitats
- 2. A positive approach toward individuals, communities, and environmental performance
- 3. Innovation in environmental technologies that reduce the impact of pollution, harmful industries, and climate change

More can be found here:

 $\underline{https://peopleandplanet.org/news/2023-03-29/press-release-university-portsmouth-drops-fossil-fuel}\\ \underline{-investments}$

https://policies.docstore.port.ac.uk/policy-025.pdf https://finance.docstore.port.ac.uk/Ethical_Invest_Statement.pdf

Section Total (20 out of 32)

62.50%

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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%		
В	60% - 79%		
С	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 Portsmouth School of Pharmacy

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

Section	Raw Score %	Letter Grade	
Planetary Health Curriculum (30%)	$(27/66) \times 100 = 40.91\%$	C-	
Interdisciplinary Research (17.5%)	(6/17) x 100 = 35.29%	D+	
Community Outreach and Advocacy (17.5%)	(6/14) x 100 = 42.86%	C-	
Support for Student-led Planetary Health Initiatives (17.5%)	(6/15) x 100= 40.00%	C-	
Campus Sustainability (17.5%)	(20/32) x 100 = 62.50%	В-	
Institutional Grade	(0.3x40.91 + 0.175x35.29 + 0.175x42.86+ 0.175x40.00 + 0.175x62.50)= 43.89 %	C-	