

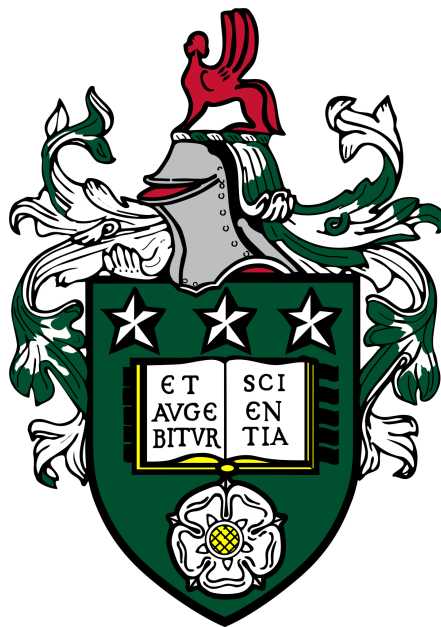


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# Planetary Health Report Card:

## *Leeds Medical School*

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2020-2021 Contributing Team:

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## Summary of Findings

<b>Curriculum</b>	<b>B</b>
<p>There was some provision of Planetary Health (PH) teaching for all students and attempts to cover key themes such as health inequality of climate change. For students who are keen on PH, there is an option to take up Special Studies Projects (SSPs) and electives.</p> <p>Our recommendation is for more teaching on how to talk to patients about PH/sustainability, consideration of health inequalities alongside PH, and integration into the general curriculum as opposed to confinement to early year modules.</p>	
<b>Interdisciplinary Research</b>	<b>D+</b>
<p>The Annual Sustainability Research Conference encourages student involvement. It also provides the opportunity for students to promote their research. It was clear that their research commitment is strong, such titles relevant to PH include e.g. <i>Effectiveness of interventions responding to the health impacts of climate change in lower middle income countries</i>.</p> <p>Our recommendation is to consider joining the Planetary Health Alliance or the Global Consortium on Climate and Health Education and increase research opportunities for medical students.</p>	
<b>Community Outreach and Advocacy</b>	<b>C-</b>
<p>The university received the lowest score in this category, where the university community outreach was more supported than specific to medical school.</p> <p>Our recommendation is for the medical school to improve their communication with students regarding planetary health, and encourage teaching and sharing of sustainable healthcare or PH through the wide variety of outreach work carried out already.</p>	
<b>Support for Student-Led Initiatives</b>	<b>C</b>
<p>Overall, the medical school seems to have little availability for students to be involved in planetary health research, particularly funded projects, whilst the university as a whole is more supportive of such ventures.</p> <p>Our recommendation is to encourage better promotion and availability of sustainability projects, and to identify and promote ways to get involved within healthcare and through the medical school. The medical school could also be more receptive and responsive in taking into account students' feedback such as with regards to accommodation e.g. no recycling available at several hospital accommodations.</p>	
<b>Sustainability</b>	<b>C+</b>
<p>The university achieved the highest score in this category, clearly evidencing well defined carbon neutral targets and appears committed to working towards them, for example full divestment from fossil fuels, however there is little information readily available on use of renewable energy sources.</p> <p>Our recommendation for the medical school is to promote sustainable travel to placements, for example more official car sharing schemes, and should consider sustainability guidelines for events, particularly as we begin to return to 'in-person'.</p>	

# Statement of Purpose

*Planetary health is human health.*

The Planetary Health Alliance defines planetary health as “a field focused on characterizing the human health impacts of human-caused disruptions of Earth's natural systems.” This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanization, 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 color, older adults sensitive to health threats, and individuals in low-resource settings), these issues are inherently ones of equity and justice.

With the purpose of increasing planetary health awareness and accountability among medical schools, we have created a Planetary Health Report Card that medical students internationally can use to grade and compare their home institutions on an annual basis. This medical-student-driven initiative aims to compare medical schools 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 centered on environmental health impacts 5) medical school campus sustainability.

# Planetary Health Curriculum

***Section Overview:*** This section evaluates the integration of relevant planetary health topics into the medical school curriculum. Today's medical students will be on the frontlines of tackling the health effects of climate change. Therefore, it is critical that medical students are trained to understand the health effects of climate change, as well as planetary health more broadly. Topics like the changing geography of vector-borne diseases, the health consequences of air pollution, environmental health inequities, and disaster response principles must be part of every medical school's core curriculum.

## *Curriculum: General*

<b>1. Did your medical school offer elective courses to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?</b>	
<b>3*</b>	<b>Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year.</b>
2	Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year.
1	The medical school does not have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a lecture on planetary health.
0	No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.
<p><i>In years 2 and 3, students are all required to take part in the Research, Evaluation and Special Studies project (RESS SSP). The RESS SSP is a two week module that happens during the last two weeks of term 1. This is an opportunity for students to experience something different – either in terms of content or in terms of the environment you learn in. This is a unique project providing a breadth of curricular experiences outside of mainstream medical education and offers a unique opportunity for you to work with peers in year 2 and 3. Topics like, “climate change and health”, “environmental impacts on health”, “sustainability in the supply chain” and “clinical waste at the University” were examples of topics that were explored.</i></p>	

## *Curriculum: Health Effects of Climate Change*

<b>2. Does your medical school curriculum address the relationship between extreme temperature health risks and climate change, as well as the socioeconomic/racial disparities in extreme heat exposure?</b>	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.

<b>0</b>	<b>This topic was not covered.</b>
<i>No, this topic is not currently covered in either the core curriculum or elective coursework.</i>	

<b>3. Does your medical school curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?</b>	
<b>3</b>	<b>This topic was explored in depth by the core curriculum.</b>
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>As part of the 2nd year core curriculum at The University of Leeds, the 'Individuals and Populations 2' (I&amp;P) module provides a new opportunity for students to learn about planetary health. This is taught via lectures (currently online due to COVID-19) and self-directed study. There are 3x4 hour teaching blocks allocated to the planetary health teaching and the module is taught in two parts. The first section is called 'Climate and Health' and the second section is called 'Ecosystem Transformation'. This new program is being led by Dr Emma O'Neill and Dr Gemma Ashwell and is launching in April 2021 for the first time.</i></p> <p><i>The 'Climate and Health' section discusses the impact of wildfires, heatwaves, droughts and floods on the health of individuals and also the ability of health systems to cope. The module also discusses how these events result in refugees and climate migration.</i></p>	

<b>4. Does your medical school curriculum address the impact of climate change on the changing patterns of infectious diseases?</b>	
<b>3</b>	<b>This topic was explored in depth by the core curriculum.</b>
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>The year 2 'Individuals and Populations' module discusses the impact of climate change on the changing patterns of infectious disease within the 'Ecosystem Transformation' section. The module discusses the emergence of infectious diseases from wildlife trade, deforestation and agriculture.</i></p>	

<b>5. Does your medical school curriculum address the cardiorespiratory health effects of climate change, including air pollution?</b>	
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3	This topic was explored in depth by the core curriculum.
2	<b>This topic was briefly covered in the core curriculum.</b>
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>The 'Climate and Health' section of the year 2 'Individuals and Populations' module discusses the impact of air pollution on children, focussing on the impact on primary school children in more deprived areas. The module discusses the case study of Ella Adoo-Kissi-Debrah as the first person in the UK to have air pollution listed as a cause of death.</i></p>	

<b>6. Does your medical school curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?</b>	
3	This topic was explored in depth by the core curriculum.
2	<b>This topic was briefly covered in the core curriculum.</b>
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>The 'Ecosystem Transformation' section of the year 2 'Individuals and Populations' module discusses the impact of green spaces and biodiversity on mental health.</i></p>	

<b>7. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?</b>	
3	<b>This topic was explored in depth by the core curriculum.</b>
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>The 'Ecosystem Transformation' section of the year 2 'Individuals and Populations' module discusses the impact of agriculture and deforestation on the spread of infectious disease and the origin of pandemics. Emission from food production as well as the effect on freshwater ecosystems is also discussed.</i></p>	

**8. Does your medical school curriculum address the outsized impact of climate change on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, and older adults?**

<b>3</b>	<b>This topic was explored in depth by the core curriculum.</b>
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

*The 'Climate and Health' section of the year 2 'Individuals and Populations' module teaches environmental justice and the disproportionate impact of climate change on low income countries and low SES. The 'Ecosystem Transformation' module discusses the impact of climate change and deforestation on indigenous populations. The module also discusses the outsized impact of air pollution on children. However, the effect on women, homeless populations and older populations are not discussed.*

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

<b>3</b>	<b>This topic was explored in depth by the core curriculum.</b>
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

*The 'Climate and Health' section of the year 2 'Individuals and Populations' module discusses climate justice and the disproportionate impact of climate change on low and middle income countries. The module discusses how the populations of these countries suffer from climate change despite contributing less to the crisis. The effect of climate change on indigenous people around the globe is also discussed.*

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

**10. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?**

3	This topic was explored in depth by the core curriculum.
<b>2</b>	<b>This topic was briefly covered in the core curriculum.</b>
1	This topic was covered in elective coursework.

0	This topic was not covered.
<i>The 'Ecosystem transformation' section of the year 2 'Individuals and Populations' module briefly mentions the effect of pesticides on reproductive health.</i>	

<b>11. Does your medical school curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?</b>	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
<b>0</b>	<b>This topic was not covered.</b>
<i>No, this topic is not currently covered in either the core curriculum or elective coursework.</i>	

<b>12. Does your medical school curriculum address the unique climate and environmental health challenges that have impacted and are impacting Indigenous communities?</b>	
3	This topic was explored in depth by the core curriculum.
<b>2</b>	<b>This topic was briefly covered in the core curriculum.</b>
1	This topic was covered in elective coursework.
0	This topic was not covered.
<i>The year 2 'Individuals and Populations' module shows a video explaining the impact on deforestation on indigeneous people around the world.</i>	

<b>13. Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, and older adults?</b>	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
<b>0</b>	<b>This topic was not covered.</b>
<i>No, this topic is not currently covered in either the core curriculum or elective coursework.</i>	



*Curriculum: Sustainability*

<b>14. Does your medical school curriculum address the environmental and health co-benefits of a plant-based diet?</b>	
<b>3</b>	<b>This topic was explored in depth by the core curriculum.</b>
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>The 'Ecosystem Transformation' section of the year 2 'Individuals and Populations' module teaches about the EAT-Lancet diet and discusses the impact of a planet friendly diet on the health of individuals as well as the environment. The module discusses the rise in obesity and the links between red/processed meat and cancer and cardiovascular conditions.</i></p>	

<b>15. Does your medical school curriculum highlight the waste generated by the healthcare system and identify ways to advocate for and implement sustainable best practices in health care?</b>	
3	This topic was explored in depth by the core curriculum.
<b>2</b>	<b>This topic was briefly covered in the core curriculum.</b>
1	This topic was covered in elective coursework.
0	This topic was not covered.
<p><i>The 'Climate and Health' section of the year 2 'Individuals and Populations' module mentioned the environmental impact of inhalers, and the greenhouse emissions from anaesthesia gasses. The module also highlights the issue of pharmaceutical waste and the increase in plastic pollution noted throughout the pandemic.</i></p>	

*Curriculum: Clinical Applications*

<b>16. In training for patient encounters, does your medical school's curriculum introduce strategies to have conversations with patients about the health effects of climate change?</b>	
2	Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum.
1	Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework.

0	<b>No, there are not strategies introduced for having conversations with patients about climate change</b>
<p><i>Although it is worth noting that although the medical school does not provide strategies for having conversations with patients about climate change, the 'Individual and Populations' module does talk about the importance of taking a pollution history and how to counsel patients about eating a plant based diet.</i></p>	

<b>17. In training for patient encounters, does your medical school's curriculum introduce strategies for taking an environmental history or exposure history?</b>	
2	<b>Yes, the core curriculum includes strategies for taking an environmental history.</b>
1	Only elective coursework includes strategies for taking an environmental history.
0	No, the curriculum does not include strategies for taking an environmental history.
<p><i>The Campus to Clinic module in year 1 and year 2 teaches students how to take a full social history. Students are encouraged to gather details on environmental and occupational hazards.</i></p>	

***Curriculum: Administrative Support for Planetary Health***

<b>18. Is your medical school currently in the process of improving Education for Sustainable Healthcare (ESH)/planetary health education?</b>	
4	Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education.
2	<b>Yes, the medical school is currently in the process of making minor improvements to ESH/planetary health education.</b>
0	No, there are no improvements to planetary health education in progress.
<p><i>The 'Individual and Populations' module is being introduced in April 2021 for the first time. This is the first compulsory module at the University of Leeds medical school that teaches about planetary health. Although this is a big step in the right direction, the teaching is limited to one module in one year group. It is however a great starting point that can be used as a proof of concept and hopefully extrapolated to other modules/year groups for a more longitudinal approach.</i></p>	

<b>19. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core curriculum?</b>	
6	Planetary health/ESH topics are well integrated into the core medical school curriculum.

4	<b>Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum.</b>
2	Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s).
0	There is minimal/no education for sustainable healthcare.
<p><i>The RESS SSP module (years 2 and 3) and the I &amp; P module (year 2) are the key components of the planetary health teaching offered at the University of Leeds.</i></p> <p><i>Compulsory electives in 4th year also provide an opportunity for students to explore planetary health. All 4th years at Leeds medical school are required to conduct a 6 to 8 week pre-organised compulsory elective. This is an opportunity to explore additional healthcare institutions outside of the University of Leeds. Students can choose from a pre-designed elective or organise their own. The University of Leeds currently offers an elective associated with the Centre for Sustainable Healthcare which focuses on audits, green projects organised in the NHS.</i></p>	

<b>20. Bonus: Does your medical school have a program that offers incentives for faculty/departments to develop new planetary health/ESH courses and/or incorporate planetary health/ESH into existing courses?</b>	
1*	Yes, the medical school has an incentive program.
0	<b>No, the medical school does not have an incentive program.</b>
<i>No, the medical school does not have an incentive program.</i>	

<b>Section Total (39 out of 58)</b>	<b>39</b>
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# Interdisciplinary Research

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

1. Are there researchers engaged in planetary health research and healthcare sustainability research at your medical school?	
4	Yes, there are faculty members at the School of Medicine who have a primary research focus in planetary health and healthcare sustainability.
3	<b>Yes, there are faculty members at the School of Medicine who have a primary research focus in a planetary health or healthcare sustainability.</b>
2	Yes, there are individual faculty members at the School of Medicine who are conducting research related to planetary health or healthcare sustainability, but it is not their primary research focus.
1	There are planetary health and/or healthcare sustainability researchers at the institution, but none associated with the medical school.
0	No, there are no planetary health and/or healthcare sustainability researchers at the institution or medical school at this time.
<p><i>Medical School Research and Innovation:</i></p> <ul style="list-style-type: none"> <li>- <i>Planetary health: Climate change and health   Resilience   Sustainability Theme lead: Prof Lea Berrang Ford (Research Group at the Nuffield Centre for International Health and Development)</i> <ul style="list-style-type: none"> <li>- <i>Effectiveness of interventions responding to the health impacts of climate change in LMIC</i></li> </ul> </li> </ul> <p><i>Other Schools:</i></p> <ul style="list-style-type: none"> <li>- <a href="#">Climate Impacts   School of Earth and Environment   University of Leeds</a></li> <li>- <i>HACC - Indigenous Health Adaptation to Climate Change (<a href="https://www.ihacc.ca">https://www.ihacc.ca</a>)</i></li> <li>- <i>Various projects on food security and global health</i></li> <li>- <a href="#">Dr Dan O'Neill   School of Earth and Environment   University of Leeds</a> - <i>relationships between resource use and human well-being; planetary health</i></li> </ul>	

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

3	<b>There is at least one dedicated department or institute for interdisciplinary planetary health research.</b>
2	There is not currently a department or institute for interdisciplinary planetary health research, but there are plans to open one in the next 3 years.
1	There is an Occupational and Environmental Health department, but no interdisciplinary department or institute for planetary health research.
0	There is no dedicated department or institute.
<a href="https://medicinehealth.leeds.ac.uk/dir-record/research-groups/651/research-at-the-nuffield-centre-for-international-health-and-development">https://medicinehealth.leeds.ac.uk/dir-record/research-groups/651/research-at-the-nuffield-centre-for-international-health-and-development</a>	

<b>3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your medical school?</b>	
3	Yes, there is a process in which community members impacted by climate and environmental injustice have decision-making power in the climate + environmental research agenda.
2	Yes, there is a process in which community members impacted by climate and environmental injustice advise the climate + environmental research agenda.
1	No, but there are current efforts to establish a process for community members to advise or make decisions on the research agenda.
0	<b>There is no process, and no efforts to create such a process.</b>
<i>Unable to identify a process.</i>	

<b>4. Does your institution have a planetary health website, or a website centralizing various campus resources related to health and the environment?</b>	
3	There is an easy-to-use, adequately comprehensive website that centralizes various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities.
2	There is a website that attempts to centralize various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive.
1	<b>The institution has an Office of Sustainability website that includes some resources related to health and the environment.</b>
0	There is no website.
<a href="https://sustainability.leeds.ac.uk">https://sustainability.leeds.ac.uk</a>	

<b>5. Has your institution recently hosted a conference or symposium on topics related to planetary health?</b>	
4	Yes, the institution has hosted more than one conference or symposium on topics related to planetary health in the past year, including at least one on climate change.
3	Yes, the institution has hosted one conference or symposium on topics related to planetary health in the past year.
2	Yes, the institution has hosted a conference on topics related to planetary health in the past three years.
1	The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event.
0	<b>No, the institution has not hosted a conference on topics related to planetary health in the past three years.</b>
<a href="https://sustainability.leeds.ac.uk/news/student-sustainability-research-conference-2020/">https://sustainability.leeds.ac.uk/news/student-sustainability-research-conference-2020/</a>	

<b>6. Has your institution or medical school joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education?</b>	
2	Yes, the medical school has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education.
1	Yes, the institution has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education, but the medical school specifically has not.
0	<b>No, the institution has not joined the Planetary Health Alliance or the Global Consortium on Climate and Health Education.</b>
<i>Neither lists the university as a member.</i>	

<b>Section Total (7 out of 19)</b>	<b>7</b>
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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 color. 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.*

<b>1. Does your medical school partner with community organizations to promote planetary and environmental health?</b>	
<b>3</b>	<b>Yes, the medical school meaningfully partners with multiple community organizations to promote planetary and environmental health.</b>
2	Yes, the medical school meaningfully partners with one community organization to promote planetary and environmental health.
1	The institution partners with community organizations, but the medical school is not part of that partnership.
0	No, there is no such meaningful community partnership.
<p><a href="https://sustainability.leeds.ac.uk/get-involved/engaging-supporting-communities/">https://sustainability.leeds.ac.uk/get-involved/engaging-supporting-communities/</a>  <a href="https://sustainability.leeds.ac.uk/active-travel-neighbourhoods-come-to-leeds/">https://sustainability.leeds.ac.uk/active-travel-neighbourhoods-come-to-leeds/</a>  <i>Active Travel Neighbourhood, aiming to address key areas such as:</i></p> <ul style="list-style-type: none"> <li>- <i>Reducing pollution to improve air quality and local health outcomes</i></li> <li>- <i>Boosting confidence to undertake more active travel (e.g. walking, running and cycling) to local shops and amenities.</i></li> </ul>	

<b>2. Does your medical school offer community-facing courses or events regarding planetary health?</b>	
3	The medical school offers community-facing courses or events at least once every year.
2	The medical school offers courses or events open to the community at least once per year, but they are not primarily created for a community audience.
1	The institution has offered community-facing courses or events, but the medical school was not involved in planning those courses or events.
<b>0</b>	<b>The medical school has not offered such community-facing courses or events.</b>



*Nothing specifically linked to planetary health, obviously:*

*The University of Leeds plays its part in making Leeds the great place it is. We are committed to being a positive partner in society and work collaboratively with inspirational individuals and organisations within and beyond campus.*

*There are lots of opportunities for staff to share their knowledge, experience and their passion, and positively contribute to communities. These initiatives also help to build the knowledge and capacity of the individuals and organisations involved.*

[Engaging and supporting communities | Sustainability Service](#)

**3. Does your medical school have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?**

2	Yes, all students regularly receive communication updates dedicated to planetary health and/or sustainable healthcare.
1	Yes, planetary health and/or sustainable healthcare topics are sometimes included in communication updates.
0	<b>Students do not regularly receive communications about planetary health or sustainable healthcare.</b>

*No regular updates.*

**4. Do hospitals affiliated with your medical school have accessible educational materials for patients about environmental health exposures?**

2	Yes, all affiliated hospitals have accessible educational materials for patients.
1	<b>Some affiliated hospitals have accessible educational materials for patients.</b>
0	No affiliated medical centers have accessible educational materials for patients.

[Air Pollution: The Magical Power of Nature – Born In Bradford](#) - Bradford e..g pollutants linked to low birth weight and benefits of green space for mothers and children

**5. Do hospitals affiliated with your medical school have accessible educational materials for patients about climate change and health impacts?**

2	Yes, all affiliated hospitals have accessible educational materials for patients.
1	<b>Some affiliated hospitals have accessible educational materials for patients.</b>

0	No affiliated hospitals have accessible educational materials for patients.
<i>Leeds:</i> <a href="https://www.leedsth.nhs.uk/assets/Sustainability/ef5aeb9559/Sustainability-Brochure-FINAL.pdf">https://www.leedsth.nhs.uk/assets/Sustainability/ef5aeb9559/Sustainability-Brochure-FINAL.pdf</a>	

<b>Section Total (5 out of 12)</b>	<b>5</b>
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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.

<b>1. Does your institution offer support for medical students interested in enacting a sustainability initiative?</b>	
2	Yes, the institution offers grants available to medical students for students to enact sustainability initiatives.
1	The medical school encourages sustainability QI projects (to fulfill clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, but there is no student funding available.
0	<b>No, the institution does not offer opportunities or support for sustainability initiatives.</b>
<i>Unable to identify specific grants or opportunities. There may be some support available if a student was to directly pursue a sustainability initiative.</i>	

<b>2. Does your institution offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare?</b>	
3*	The institution offers an explicit paid fellowship for medical students to do research related to planetary health and/or sustainable healthcare.
2*	The institution offers paid research opportunities for students and planetary health/sustainable healthcare projects would be considered eligible.
1	<b>There are unfunded research opportunities for students to perform research related to planetary health/sustainable healthcare.</b>
0	There are no opportunities for students to receive funding for planetary health/sustainable healthcare research.
<i>Medical school encourages student research e.g. through ESREP (self-directed research project) / electives. A student could choose to self-design around sustainable / planetary health.</i>	

<b>3. Does the medical school have a webpage where medical students can find specific information related to planetary health and/or sustainable healthcare activities and mentors within the</b>	
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<b>medical school? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.</b>	
2	The medical school has a webpage with specific information related to planetary health or sustainable healthcare that includes up-to-date information on relevant initiatives and contact information of potential mentors.
1	There is a medical school webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information.
0	<b>There is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.</b>
<i>No webpage available.</i>	

<b>4. Does your medical school have funded, registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?</b>	
2	Yes, there is a funded student organization with faculty support at my medical school dedicated to planetary health or sustainability in healthcare.
1	<b>Yes, there is a student organization at my medical school dedicated to planetary health or sustainability in healthcare but it lacks faculty support and/or funding.</b>
0	No, there is not a student organization at my institution dedicated to planetary health or sustainability in healthcare.
<i>Leeds HESCA - Leeds Healthcare Students for Climate Action are a group of students working to improve the environmental impact of the Faculty of Medicine and Health and to those who use it. Through implementing ideas, action and awareness we hope to bring lasting change to the carbon impact of the faculty and the mindset of students.</i>	

<b>5. Is there a student liaison representing sustainability interests who serves on a medical school or institutional decision-making council to advocate for sustainability best practices?</b>	
1	Yes, there is a student representative that serves on a medical school or institutional decision-making council.
0	<b>No, there is no such student representative.</b>
<i>No representative.</i>	

<b>6. In the past year, has the institution had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)</b>	
1	Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.
1	<b>Panels, speaker series, or similar events related to planetary health that have students as an intended audience.</b>
1	<b>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.</b>
1	<b>Cultural arts events, installations or performances related to planetary health that have students as an intended audience.</b>
1	<b>Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.</b>
1	<b>Wilderness or outdoors programs (e.g., that organize hiking, backpacking, kayaking, or other outings for students) that follow Leave No Trace principles.</b>
<p>1/2 - Leeds HESCA e.g. 'Can we be both Healthcare Professionals and Activists?', Carbon Literacy Course</p> <p>3 - Climate week - <a href="https://www.luu.org.uk/climate-week/">https://www.luu.org.uk/climate-week/</a></p> <p>4 - <a href="https://www.luu.org.uk/clubs-and-societies/browse-clubs-and-societies/conservation-volunteers/">https://www.luu.org.uk/clubs-and-societies/browse-clubs-and-societies/conservation-volunteers/</a></p> <p>5 - Leeds Wilderness Society, Leeds Hiking Club, Wilderness Medicine</p> <p><a href="#">Join LUU's Climate Week Pledge Challenge</a></p>	

<b>Section Total (7 out of 14)</b>	<b>7</b>
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# Campus Sustainability

***Section Overview:*** This section evaluates the support and engagement in sustainability initiatives by the medical school and/or institution. The healthcare industry is a major contributor to greenhouse gas emissions as well as pollution that harms local, regional, and global ecosystems. While healthcare is, by nature, a resource-intensive endeavor, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinizing 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 minimizing environmental impact.

1. Does your medical school and/or institution have an Office of Sustainability?	
3	Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is at least one designated staff member for sustainability at the hospital and/or medical school.
2	<b>There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but no specific staff member in charge of medical school and/or hospital sustainability.</b>
1	There are no salaried sustainability staff, but there is a sustainability task force or committee
0	There are no staff members or task force responsible for overseeing campus sustainability
<p><i>Strong university commitment to sustainability, doesn't appear to be a specific medical school officer.</i>  <a href="https://sustainability.leeds.ac.uk">https://sustainability.leeds.ac.uk</a></p>	

2. Does your medical school and/or institution have a stated goal of carbon neutrality by 2050?	
4*	The medical school is already carbon neutral.
3	<b>Yes, there is a stated carbon neutrality goal and the medical school has a well-defined and adequate plan in place to achieve this goal.</b>
2	Yes, there is a stated carbon neutrality goal, but the medical school has not created a plan to reach that goal or the plan is inadequate.
1	There is a CO2 emission reduction goal, but it is not one of carbon neutrality.
0	There is no stated goal for reduction of CO2 emissions.
<p><i>'We shall prepare our next Climate plan and sustainability strategy with a view to securing a net-zero carbon footprint by 2030, twenty years earlier than the Intergovernmental Panel on Climate Change (IPCC) recommends. Furthermore, although we cannot yet guarantee to achieve it, it is our aim as an institution to have no direct carbon emissions by 2050.</i></p>	

*The Climate plan is an operational guide for our staff and students to follow to help us reach net-zero carbon emissions by 2030 and zero carbon by 2050. It's going to require the mobilisation of our whole staff and student community to reach our targets. Find out what you can do to help and how you can get involved.'*

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

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

*Unable to find specifics - estimate:*

*The University of Leeds campus comprises of more than 300 residential and academic buildings with a gross internal area of 555,111m<sup>2</sup> and has approximately 800 meters that are used for energy billing purposes.*

*There are a variety of different utilities required to keep the campus running: Grid electricity, natural gas, water, heat and electricity generated from onsite CHP and onsite renewables. The combined annual consumption in 2018 was 160,097,366 kWh of energy and 702,016 m<sup>3</sup> of water.*

*Some of this energy is provided by our own **Generating Station Complex (GSC)** and the remainder procured from energy providers. We have an annual utilities expenditure of over £12 million and on a monthly basis we can receive approximately 700 energy bills to process for payment.*

*We use esight, a web based energy management platform which collects and monitors data from our network of meters in all of our buildings which also feeds into our Dashboard so people can monitor their own energy usage in their buildings.*

**4. Are sustainable building practices utilized for new and old buildings on the medical school campus, with design and construction of new buildings and remodeling of old buildings conforming to a published rating system or sustainable building code/guideline?**

3	Yes, sustainable building practices are utilized for new buildings on the medical school campus and the majority of old buildings have been retrofitted to be more sustainable.
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2	<b>Sustainable building practices are utilized for new buildings on the medical school campus, but most old buildings have not been retrofitted.</b>
1	Sustainable building practices are inadequately or incompletely implemented for new buildings.
0	Sustainability is not considered in the construction of new buildings.
<p><i>Example from new campus construction:</i></p> <p><i>The low carbon new-build element connects to the Grade II Old Mining Building, which has been sensitively repurposed and extended with a new storey. Externally the use of engineered precast stone and materials such as Portland stone were chosen to complement the existing building and historic character of the surrounding conservation area.</i></p> <p><i>Guideline:</i>  <a href="https://sustainability.leeds.ac.uk/wp-content/uploads/sites/106/2020/09/Post-June-2019-Sustainable-Construction-Standard.pdf">https://sustainability.leeds.ac.uk/wp-content/uploads/sites/106/2020/09/Post-June-2019-Sustainable-Construction-Standard.pdf</a></p>	

<b>5. Has the medical school implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?</b>	
2	Yes, the medical school 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-utilized by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default.
1	<b>The medical school has implemented some strategies to provide environmentally-friendly transportation options, but the options are unsatisfactorily accessible or advertised.</b>
0	The medical school has not implemented strategies to encourage and provide environmentally-friendly transportation options.
<p><i>Coach transport provided for students in years 1-2 for certain placements but little support for those in older years.</i></p> <p><i>No official car-pool schemes and reliant on students informally arranging.</i></p>	

<b>6. Does your medical school have an organics recycling program (compost) and a conventional recycling program (aluminum/paper/plastic/glass)?</b>	
2	Yes, the medical school has both compost and recycling programs accessible to students and faculty.
1	<b>The medical school has either recycling or compost programs accessible to students and faculty, but not both.</b>



0	There is no compost or recycling program at the medical school.
<i>Recycling facilities around the medical school - food waste, paper, plastic, cups etc. It is not certain if the food waste is composted or collected with other waste.</i>	

**7. Does the medical school apply sustainability criteria when making decisions about the campus food and beverage selections?**

3	<b>Yes, the medical school has adequate sustainability requirements for food and beverages and is engaged in efforts to increase food and beverage sustainability.</b>
2	There are sustainability guidelines for food and beverages, but they are insufficient or optional. The medical school is engaged in efforts to increase food and beverage sustainability.
1	There are sustainability guidelines for food and beverages, but they are insufficient or optional. The medical school is not engaged in efforts to increase food and beverage sustainability.
0	There are no sustainability guidelines for food and beverages.

*GFAL is the catering / food services of the university.*

- *At the University of Leeds, we are passionate about Fairtrade and have been supporting and selling Fairtrade products since 2003. In 2005 the University of Leeds obtained Fairtrade status and our continued support has helped Yorkshire to be named the first Fairtrade region in the country.*
- *Great food at Leeds uses locally sourced food wherever possible and 65% of our suppliers are within 40 miles of the University. We follow a strict food policy which ensures ethical, sustainable procurement of all food.*
- *In March 2015 University of Leeds chefs were awarded the Gold Standard Catering Mark by the Soil Association for a menu that was put together for the Environmental Association for Universities and Colleges (EAUC) conference.*
- *KeepCup initiative - 20p discount.*

<https://gfal.leeds.ac.uk/our-story/sustainability/>

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

3	Yes, the medical school has adequate sustainability requirements for supply procurement and is engaged in efforts to increase sustainability of procurement.
2	There are sustainability guidelines for supply procurement, but they are insufficient or optional. The medical school is engaged in efforts to increase sustainability of procurement.
1	There are sustainability guidelines for supply procurement, but they are insufficient or optional. The medical school is not engaged in efforts to increase sustainability of procurement.

<b>0</b>	<b>There are no sustainability guidelines for supply procurement.</b>
<i>Unable to find published guidelines.</i>	

<b>9. Are there sustainability requirements or guidelines for events hosted at the medical school?</b>	
2	Every event hosted at the medical school must abide by sustainability criteria.
1	The medical school strongly recommends or incentivizes sustainability measures, but they are not required.
<b>0</b>	<b>There are no sustainability guidelines for medical school events.</b>
<i>No guidelines readily available. It would seem incentive to make events sustainable are on the organiser.</i>	

<b>10. Does your medical school have programs and initiatives to assist with making lab spaces more environmentally sustainable?</b>	
2	<b>Yes, the medical school has programs and initiatives to assist with making lab spaces more environmentally sustainable.</b>
1	There are guidelines on how to make lab spaces more environmentally sustainable, but not programs or initiatives.
0	There are no efforts at the medical school to make lab spaces more sustainable.
<p><i>'In 2020 we are piloting LEAF (The Laboratory Efficiency Assessment Framework), a new tool developed by University College London (UCL) to help researchers, staff and students understand and improve the sustainability and efficiency of their laboratories.</i></p> <p><i>LEAF contains criteria that lab users can implement around areas such as waste &amp; recycling, equipment management, procurement, and more. The criteria are based on actions that have already been proven to work in other laboratories. A key feature of LEAF is that it allows you to quantify your impact in both financial and carbon savings.'</i></p>	

<b>11. Does your institution's endowment portfolio investments include fossil-fuel companies?</b>	
4	The institution is entirely divested from fossil fuels and has made a commitment to reinvest divested funds into renewable energy companies or renewable energy campus initiatives.
3	No, the institution is entirely divested from fossil fuels.
2	<b>The institution has partially divested from fossil-fuel companies.</b>

1	The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organized advocacy for divestment.
0	Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.

*The University of Leeds has fully divested from significant fossil fuel extractors and has set out seven bold principles it will adopt to help tackle the climate crisis.*

*The principles have been approved by the University's governing body, its Council, and outline the ambitious steps the University is taking to support the global transition to a low carbon future. They commit to a 2030 net-zero carbon footprint target and a drive to achieve no direct carbon emissions by 2050.*

*They also include a commitment to reorient research and teaching away from the fossil fuel sector over time. This complements the Climate Active Strategy adopted last year to guide University investment. As a result of this Climate Active Strategy, the University has withdrawn investment from significant fossil fuel extractors Total, BP and Shell (Royal Dutch Shell).*

*Having done so, the University's exposure to fossil fuel extraction is now minimal, with the limited investment in this sector now focused on supporting companies who are evidently making the transition to alternative energy sources and a low-carbon economy.*

*The Climate Active Strategy will continue to guide the University's determined approach to responsible investment.*

<b>Section Total (17 out of 29)</b>	<b>17</b>
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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%

## Planetary Health Grades for the Leeds School of Medicine

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

Section	Raw Score	Grade
<b>Planetary Health Curriculum (30%)</b>	39 / 58 = 67.2%	B
<b>Interdisciplinary Research (17.5%)</b>	7 / 19 = 36.8%	D+
<b>Community Outreach and Advocacy (17.5%)</b>	5 / 12 = 41.1%	C-
<b>Support for Student-led Planetary Health Initiatives (17.5%)</b>	7 / 14 = 50.0%	C
<b>Campus Sustainability (17.5%)</b>	17 / 29 = 58.6%	C+
<b>Institutional Grade</b>	<b>52.9%</b>	<b>C</b>