

# Planetary Health Report Card (Medicine):

# Usmanu Danfodiyo University Sokoto



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#### **Summary of Findings**

Overall Grade	78%

Curriculum 99%

- There is significant integration of relevant planetary health topics into Usmanu Danfodiyo University medical school curriculum.
- **Recommendations**: More focus on the environmental impact of surgical healthcare on planetary health.

#### **Interdisciplinary Research**

82%

- Usmanu Danfodiyo University has good quality and quantity of interdisciplinary planetary health research at the broader institution level.
- **Recommendations**: Establishment of a process for community members to advise or make decisions on the research agenda, particularly as it relates to planetary health.

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

71%

- Usmanu Danfodiyo University medical school has good engagement in community outreach and advocacy efforts associated with planetary health.
- **Recommendations:** Additional community partnership relating to planetary health is advised.

#### Support for Student-Led Initiatives

80%

- Usmanu Danfodiyo University Medical School has strong institutional support for student-led planetary health initiatives, such as funding, fellowships, programming, and student groups.
- **Recommendations**: More support can be offered in areas of outdoor programs such as hiking, backpacking, kayaking, and other outings for students.

#### **Campus Sustainability**

44%

- Usmanu Danfodiyo University Medical School has only average support and engagement in sustainability initiatives
- Recommendations: There is still much room for improvement within institutional sustainability. Plans are
  already in place at the Medical School, especially in transportation and building, but we also recommend
  focusing on making lab spaces more sustainable and improving/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.

#### **Instructions for Completing the PHRC**

**Thank you!** We are really pleased to have you and your team on board to complete the PHRC at your institution. Many of you will have already been part of a completed report card or even lead the team at your school but please take a moment to read the instructions below.

For a full comprehensive step-by-step guide to completing your report card please refer to the PHRC User Guide. This page serves as a brief overview of the important methodology.

#### Completing the report card:

The Planetary Health Report Card is a self assessment tool designed to identify an institution's strengths and areas in need of improvement in regards to its planetary health education. The metric-based report card consists of five sections; 1. Curriculum, 2. Interdisciplinary Research, 3. Community Outreach, 4. Support for Student-Led Initiatives and 5. Campus Sustainability.

• Metrics. There are roughly 55 metrics (depending on your discipline). Sections 2-5 are the same across all disciplines. Each metric has different criteria for either scoring 1, 2 or 3 points. Participants should read each metric carefully and answer the question with as much accuracy as possible, drawing upon multiple sources where possible. It is vital sufficient investigation is completed for each metric to give a fair and accurate representation of your institution.

Most of the Curriculum metrics are graded by inclusion in **elective** coursework, **brief** coverage in the **core curriculum** or **in depth** coverage in the **core curriculum**.

**Elective coursework:** This score applies to material that is actively selected by the students such as a module choice, or additional lecture series. By implication, only a given proportion of the cohort will receive this taught material.

**Brief** coverage in the **core curriculum**: This score applies where a topic is covered only briefly in a core curriculum session. This implies that the entire cohort receives the same material. Brief inclusion would qualify as inclusion in a single lecture slide in a single year.

In depth coverage in the core curriculum: This score applies where a topic is taught in significant detail or where a topic is repeatedly brought up in different years. This might look like several dedicated lecture slides, or inclusion of the same topic in different lectures and teaching formats. Please consider amongst your team that this is the highest score awarded and a subjective decision must be made as to whether the topic should be awarded this score.

(A full list of definitions is provided on the below pages)

• Types of evidence. Acceptable forms of evidence include: lecture titles, learning objectives, module descriptions, descriptions of the intended learning, case titles, seminar titles, project titles, webpages, researcher profiles / biographies, news articles, publications, social media output, institutional policy documents. Please be as specific as possible.

It is essential that you have clearly justified the score for each metric, outlining in the box provided the specific content delivered in your curriculum and why you have assigned the

score. Each report card is reviewed by a member of the leadership team for accuracy and consistency across report cards. An example of the sufficient level of evidence is provided below each metric.

Please do not include **lecturers' names** without permission. The title of the lecture or module with a brief description of the material will suffice.

Where material is publicly available via an institution's website, please include hyperlinks to the webpages.

• Evidence deadline. Any material from the previous academic year and the current academic year up to the draft deadline of the 17th February 2025 may be included in this report card. Any teaching planned after this date should not be scored in this report card but can be included in the 2025/26 report. You may wish to make a note of any such teaching for your colleagues producing next year's report card.

#### **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.
- Medical School/Department vs. Institution: When "Medical school" is specified in the report card, this only refers to curriculum and resources offered by the School/department of Medicine and does not include offerings from other parts of the university (e.g. undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when "institution" is specified in the report card, we are referring to the university more broadly including all of its campuses. Any resource reasonably accessible by medical students, no matter where in the institution the resource comes from or if it is

specifically targeted for medical students, can meet this metric.

- Environmental history (Metric #19 in Curriculum Section): This is a series of questions students are taught to ask during medical encounters that elicits patients' exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mould after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution. Please be as specific as possible when providing evidence for this metric.
- **Elective:** The word "elective" refers to an optional course or lecture series that a 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 develored 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 relevant planetary health topics into the medical school curriculum. Today's medical students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that medical students are trained to understand the health effects of these changes, as well as planetary health issues and principles more broadly. Topics like the changing geography of vector-borne diseases, the health consequences of air pollution, environmental health inequities, and disaster response principles must be part of every medical school's core curriculum.

Curriculum: General

# 1.1. Did your <u>medical school</u> offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?

Yes, the medical school has offered **more than one** elective whose primary focus is ESH/planetary health in the past year. (3 points)

Yes, the medical school has offered **one** elective whose primary focus is ESH/planetary health in the past year. (2 points)

The medical school does **not** have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a **lecture** on planetary health. (1 points)

No, the medical school has **not** offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. (0 points)

Score Assigned:

3

Score explanation: Usmanu Danfodiyo University College of Health Science offers student-organised electives related to ESH:

- 1.COM 403 (Environmental Health Practice: food hygiene and market sanitation; pollution of the environment, water, noise; pollution by irradiation and industries; parasites of public health importance in Nigeria; vectors of diseases and their control; good housing; water treatment; sanitary disposal of solid waste; sewage disposal and treatment)
- 2. COM 506 (International Health: Origins and development of international health up to the Second World War; International health regulations; Other governmental and non-governmental organizations involved with international health: objectives, structural organization, and functions; The establishment, objectives and work of the TDR programme; Port Health Service); Sustainable Development Goals
- 3. COM 314: INTRODUCTION TO ENVIRONMENTAL HEALTH

The environment of Man in its totality; Components of the environment (physical, biological and social); Man's interaction with the environment; The physical environment of man and health

4. COM 308: PRINCIPLES OF INFECTIOUS DISEASE EPIDEMIOLOGY

Basic concepts of the interaction of agent, host and environment (Epidemiologic Triad); Dynamics of disease transmission - basic definitions, chain of infection; Principles of Control of Communicable Diseases; Disease prevention and control;

Investigation and Management of epidemics;

Concept of Disease screening; Association and causation

5. COMM 203 Medical Sociology: Man's interaction with his Environment: adaptation process, balance and change; Food chain Man's interaction with his Environment: adaptation process, balance and change; Food chain.

This fits into the ESH, although Planetary Health isn't specifically included in the curriculum.

#### Curriculum: Health Effects of Climate Change

1.2. Does your <u>medical school</u> curriculum address the relationship between extreme heat, health risks, and climate change?				
This topic was explored in depth by the core curr	riculum. (3 points)			
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)				
This topic was covered in <b>elective</b> coursework. (1 point)				
This topic was <b>not</b> covered. (0 points)				
Score Assigned:	3			
Score explanation: As part of the core curriculum at Usmanu Danfodiyo University College of Health Science, COM 314: INTRODUCTION TO ENVIRONMENTAL HEALTH The environment of Man in its totality; Components of the environment (physical, biological and social); Man's interaction with the environment; The physical environment of man and health				

1.3. Does your <u>medical school</u> curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?				
This topic was explored <b>in depth</b> by the <b>core</b> curriculum. (3 points)				
This topic was <b>briefly</b> covered in the <b>core</b> curriculum. (2 points)				
This topic was covered in <b>elective</b> coursework. (1 point)				
This topic was <b>not</b> covered. (0 points)				
Score Assigned:	3			

Score explanation: Usmanu Danfodiyo University College of health science, curriculum included lectures titled:

COM 403 (Environmental Health Practice: food hygiene and market sanitation; pollution of the environment, water, noise; pollution by irradiation and industries; parasites of public health importance in Nigeria; vectors of diseases and their control; good housing; water treatment; sanitary disposal of solid waste; sewage disposal and treatment)

# 1.4. Does your medical school curriculum address the impact of climate change on the changing patterns of infectious diseases? This topic was explored in depth by the core curriculum. (3 points) This topic was briefly covered in the core curriculum. (2 points) This topic was covered in elective coursework. (1 point) This topic was not covered. (0 points)

3

Score explanation: Usmanu Danfodiyo University College of Health Science has a course COM 407: OCCUPATIONAL HEALTH

Introduction to Occupational Health; Occupational Environment and Hazards; Impact of Work on Health and Health on Work; Common Occupational Health Diseases and Health-related Problems in Nigeria and their Control; Health Problems of Agricultural Workers in Nigeria; Occupational Health Services and their functions; Occupational health policies and legislations; Workman Compensation Act, etc. National and International Regulations relating to Occupational Health

1.5. Does your medical school	curriculum address	the respiratory	health effects	of climate
change and air pollution?				

This topic was explored in depth by the core curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

Score Assigned:

3

Score explanation: At Usmanu Danfodiyo University College of Health Science there is a course COM 403: ENVIRONMENTAL HEALTH PRACTICE; Air pollution and Health. The session focuses exclusively on air pollution and its effects on respiratory and cardiovascular diseases. The discussion includes approaching air quality and mechanisms of injury while thinking about the patient.

1.6. Does your <u>medical school</u> curriculum address the cardiovascular health effects of climate change, including increased heat?

This topic was explored in depth by the core curriculum.

This topic was briefly covered in the core curriculum.

This topic was covered in elective coursework.

This topic was not covered.

Score Assigned:

3

Score explanation: Part of the required courses at Usmanu Danfodiyo University College of Health Science are;

COM 403 (Environmental Health Practice: food hygiene and market sanitation; pollution of the environment, water, noise; pollution by irradiation and industries; parasites of public health importance in Nigeria; vectors of diseases and their control; good housing; water treatment; sanitary disposal of solid waste; sewage disposal and treatment)

The session covers how the activities of man in the environment can cause a change in climatic conditions with a resultant effect on health.

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

This topic was explored in depth by the core curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

3

Score explanation: Part of the required courses at Usmanu Danfodiyo University of Health Science are;

COM 403: ENVIRONMENTAL HEALTH PRACTICE

"Air pollution and Health, occupational environment and hazards; the impact of work on health and health on work, Mental health (including social aspects), special care, child care and marriage guidance,

COM 203: Medical Sociology:

Mental health (including social aspects), special care, child care and marriage guidance COM 407: OCCUPATIONAL HEALTH [3(3+0)] 22 Introduction to occupational health; occupational environment and hazards; impact of work on health and health on work

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

This topic was explored in depth by the core curriculum.

This topic was <b>briefly</b> covered in the <b>core</b> curriculum.			
This topic was covered in <b>elective</b> coursework.			
This topic was <b>not</b> covered.			
Score Assigned:	3		

Score explanation: Usmanu Danfodiyo University College of Health Science, the current curriculum there's a lecture on

COM 314: INTRODUCTION TO ENVIRONMENTAL HEALTH

"Man's interaction with his Environment: adaptation process, balance and change; Food chain"

It states the climate change effects on ecosystems and particular species as impacting microbial proliferation; and impaired crop, livestock and fisheries yields, leading to impaired nutrition, health and survival.

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

This topic was explored in depth by the core curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

3

Score explanation: The Usmanu Danfodiyo University College of Health Science curriculum covers the impact of climate change on marginalised populations in the COM 401: Maternal and Child Health

Objectives and components of Maternal and Child Health Services; Integration of Maternal and Child Health and Family Planning Programme; Organization of Family Health and Counselling Services for rural and urban communities; Monitoring and Evaluation of Family Health Services for rural and urban communities; Human rights – including rights of the child, women and other vulnerable individuals; universal declaration of human rights; international convention on the elimination of all forms of racial discrimination and sexual harassment; Convention on the Elimination of all forms of Discrimination against Women (CEDAW); Convention against torture and other cruel, inhuman or degrading treatment or punishment; Violence against women I: Female Genital Cutting (FGC), Male Child Preference and Discrimination against the Girl Child; Forced early marriage, Puberty and Widowhood rites; Violence against women II: Intimate partner violence, Wife Inheritance and Hospitality Practices, Sexual Abuse and Women Trafficking; Convention of the Rights of the Child

#### COM 504: REHABILITATIVE AND SOCIAL MEDICINE

Introduction to rehabilitative and social medicine; concepts and principles The underprivileged members of society; Provisions for the underprivileged members of the community Classification and causes of handicaps; Critical appraisal of programs for the case of the handicapped

Disaster Relief; Comparison of social welfare services in Nigeria and other countries

# 1.10. Does your <u>medical school</u> curriculum address the unequal regional health impacts of climate change globally?

This topic was explored in depth by the core curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

3

Score explanation: Usmanu Danfodiyo University College of Health Science curriculum there is a Global Health Module that explores the Overview of International Health and Sustainable Development Goals.

In addition, there is a lecture for the second year which states: "Explain the impact of climate change, conflict and other natural and anthropogenic events on the health of vulnerable (women, children, older adults) populations around the world."

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

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

This topic was explored **in depth** by the **core** curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

3

Score explanation: In Usmanu Danfodiyo University College of Health Science as part of the curriculum;

COM 407: OCCUPATIONAL HEALTH

Introduction to occupational health; occupational environment and hazards; impact of work on health and health on work; Common Occupational Health Diseases and Health related problems in Nigeria and their control; Occupational health policies and legislations; Workman Compensation Act, etc. National and International Regulations relating to Occupational Health; Occupational Health Services and their functions

COM 403: ENVIRONMENTAL HEALTH PRACTICE

Air Pollution and Health; Radiation and Health

1.12. Does your <u>medical school</u> curriculum add threats that are relevant to the university's sur	•
This topic was explored in depth by the core curr	iculum.
This topic was <b>briefly</b> covered in the <b>core</b> curricu	lum.
This topic was covered in <b>elective</b> coursework.	
This topic was <b>not</b> covered.	
Score Assigned:	3
Score explanation: In Usmanu Danfodiyo Universal Introductory lab posting and rural posting curricular and Occupational Health" presented to 4th-year senvironmental threats refuse dumping, use of ferti relevant to the university's surrounding communitary.	ulum, the lecture titled "Environmental Health students extensively covers the human-caused ilizers reckless bush burning e.t.c) that are
1.13. To what extent does your <u>medical school</u> extended the knowledge and value systems as essential comp	
This topic was explored in depth by the core curr	iculum.
This topic was <b>briefly</b> covered in the <b>core</b> curricu	lum.
This topic was covered in <b>elective</b> coursework.	

Score explanation: In the 4th year, 4-weeks **rural posting** schedule (where students under supervision of faculty members go to different communities within the state and interact with the residents, create awareness about health related topic and learn some values of each communities) at Usmanu Danfodiyo University College of Health Sciences, emphasis on knowing the importance of Indigenous knowledge and value systems components of planetary health is well covered

3

1.14. Does your <u>medical school</u> curriculum address the outsized impact of anthropogenic environmental toxins on marginalised populations such as those with low SES, women, communities of colour, children, homeless populations, Indigenous populations, and older adults?

This topic was explored in depth by the core curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was **not** covered.

Score Assigned:

This topic was covered in <b>elective</b> coursework.			
This topic was <b>not</b> covered.			
Score Assigned:	3		

Score explanation: At Usmanu Danfodiyo University College of Health Science the following courses are offered;

COM 504: REHABILITATIVE AND SOCIAL MEDICINE

Introduction to rehabilitative and social medicine; concepts and principles

The underprivileged members of society; Provisions for the underprivileged members of the community

Classification and causes of handicaps; Critical appraisal of programs for the case of the handicapped

Disaster Relief; Comparison of social welfare services in Nigeria and other countries

#### COM 401: Maternal and Child Health

Objectives and components of Maternal and Child Health Services; Integration of Maternal and Child Health and Family Planning Programme; Organization of Family Health and Counselling Services for rural and urban communities; Monitoring and Evaluation of Family Health Services for rural and urban communities; Human rights – including rights of the child, women and other vulnerable individuals; universal declaration of human rights; international convention on the elimination of all forms of racial discrimination and sexual harassment; Convention on the Elimination of all forms of Discrimination against Women (CEDAW); Convention against torture and other cruel, inhuman or degrading treatment or punishment; Violence against women I: Female Genital Cutting (FGC), Male Child Preference and Discrimination against the Girl Child; Forced early marriage, Puberty and Widowhood rites; Violence against women II: Intimate partner violence, Wife Inheritance and Hospitality Practices, Sexual Abuse and Women Trafficking; Convention of the Rights of the Child

Curriculum: Sustainability

1.15. Does your <u>medical school</u> curriculum address the environmental and health co-benefits of a plant-based diet?			
This topic was explored in depth	y the <b>core</b> curriculum.		
This topic was <b>briefly</b> covered in the <b>core</b> curriculum.			
This topic was covered in <b>elective</b> coursework.			
This topic was <b>not</b> covered.	_		
Score Assigned:	3		
Score explanation: At Usmanu Danfodiyo University	College of Health Science, the following courses are offered	<i>l;</i>	

#### COM 502: PUBLIC HEALTH NUTRITION

Definition; Relationship between Diet and Nutrition; Factors affecting nutrition in Nigeria, common eating habits; Family feeding pattern etc;

Nutritional values of common Nigerian Foodstuffs; Food supplies and Distribution; Nutrition Education; Problems associated with unbalanced diet; The Relevance of Nutrition to Health; Epidemiology and Control of the Common Nutritional Disorders in Nigeria Assessment of Nutritional Status

Infection and Nutrition; Food Policy, Hygiene and Toxicology; School Health Programme.

#### COM 314: INTRODUCTION TO ENVIRONMENTAL HEALTH

"Man's interaction with his Environment: adaptation process, balance and change; Food chain"

# 1.16. Does your <u>medical school</u> curriculum address the carbon footprint of healthcare systems?

This topic was explored in depth by the core curriculum.

This topic was **briefly** covered in the **core** curriculum.

This topic was covered in **elective** coursework.

This topic was **not** covered.

Score Assigned:

3

Score explanation: At Usmanu Danfodiyo University College of Health Science the following courses are offered, MED 502 RESPIRATORY SYSTEM I, MED 602 RESPIRATORY SYSTEM II in internal Medicine curriculum and COM 403: ENVIRONMENTAL HEALTH PRACTICE Air pollution and Health.

1.17. Does your <u>medical school</u> curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (points for each)	Score
The health <b>and</b> environmental <b>co-benefits</b> of <b>avoiding</b> over-medicalisation, over-investigation and/or over-treatment (2 points)	2
The environmental impact of <b>pharmaceuticals</b> and over-prescribing as a cause of climate health harm. Alternatively teaching on <b>deprescribing</b> where possible and its environmental and health co-benefits would fulfil this metric. (2 points).	2
The health <b>and</b> environmental <b>co-benefits</b> of <b>non-pharmaceutical management</b> of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK. (1 point)	1
Environmental impact of <b>surgical</b> healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	0

The impact of <b>anaesthetic</b> gases on the healthcare carbon footprint and ways to reduce anaestheisa's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)	1
The impact of <b>inhalers</b> on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)	1
Waste production within healthcare clinics and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting) (1 point)	1

#### Score explanation:

- 1. At Usmanu Danfodiyo University Sokoto, as part of the 400 level introductory lab posting, The health **and** environmental **co-benefits** of **avoiding** over-medicalisation, over-investigation and/or over-treatment was covered under ENVIRONMENTAL HEALTH PRACTICES
- 2. At Usmanu Danfodiyo University Sokoto, as part of the 600 level final block posting, The environmental impact of **pharmaceuticals** and over-prescribing as a cause of climate health harm. Alternatively teaching on **deprescribing** where possible and its environmental and health co-benefits would fulfil this metric was covered under PHYSICAL EXAMINATION AND CLINICAL MANAGEMENT IN PUBLIC HEALTH
- 3. At Usmanu Danfodiyo University Sokoto, as part of the 600 level final block posting, The environmental impact of **pharmaceuticals** and over-prescribing as a cause of climate health harm. Alternatively teaching on **deprescribing** where possible and its environmental and health co-benefits would fulfil this metric was covered under PHYSICAL EXAMINATION AND CLINICAL MANAGEMENT IN PUBLIC HEALTH

Curriculum: Clinical Applications

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

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

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

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

Score Assigned: 2

Score explanation: At Usmanu Danfodiyo University of Health Science, during the "lecture on counselling in public health" in the sixth-year final block posting (MED 613 RURAL POSTING), students are taught best practices to discuss the health effects of climate change on encounter with patients, using Reproductive health issues and malnutrition as an example.

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

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

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

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

Score Assigned:

2

Score explanation: At Usmanu Danfodiyo University College of Health Science, students are trained to take a full history, which includes asking about environmental and occupational exposure, through their clinical posting. It is covered under MED 401 INTRODUCTION TO CLINICAL MEDICINE I, MED 401 INTRODUCTION TO CLINICAL MEDICINE II, MED 6132 RURAL POSTING, SUG 401 INTRODUCTORY SURGERY

#### Curriculum: Administrative Support for Planetary Health

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

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

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

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

Score Assigned:

\_

Score explanation: At Usmanu Danfodiyo University College of Health Science, one health was accepted in the curriculum in 2024 and is currently open for postgraduate master student enrollment. There are currently efforts to expand one health education into the general curriculum both at undergraduate.

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

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

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

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

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

Score Assigned:				6					
	1	4. 77	Ъ	C 1.			CII 11 G :	EGII.	1.

Score explanation: At Usmanu Danfodiyo University College of Health Science, ESH is covered in all years of medical school of the new curriculum introduced in 2024. In the old curriculum topics such as environmental and occupational hazard exposure are well integrated throughout the curriculum but coverage of ESH is not spread through all years.

1.22. Does your <u>medical school</u> employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?

**Yes**, the **medical school** has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)

**No**, the **medical school** does **not** have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)

1

Score Assigned:

*Score explanation:* Yes, the medical school has a specific faculty member responsible for overseeing the curricular integration of planetary health and sustainable healthcare

Section Total (71 out of 72)	99%
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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)

Score Assigned: 3

Score explanation: Yes, there are faculty members at the institution who have a primary research focus in sustainable healthcare in community medicine and veterinary medicine

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

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

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

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

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

Score Assigned: 3

There is at least one dedicated department or institute for interdisciplinary planetary health research.--- One Health Institute

# 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:

2

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

An example is when the leaders of communities around sokoto meet with concerned individuals affiliated to the university on providing solution to issue of cholera outbreak- a possible consequence of climate change in sokoto state.

# 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

There is a website that attempts to centralise various campus resources related to onehealth and the environment, but it is not updated and not adequately comprehensive.

Attached is the website link: https://onehealthudusok.com.ng/

# 2.5. Has your <u>institution</u> recently hosted a conference or symposium on topics related to planetary health?

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

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

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

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

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

Score Assigned:

4

Yes, the institution has hosted at least one symposium on topics related to onehealth in 2024

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

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

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

Score Assigned:

0

Score explanation: No, the institution is not a member of such an organisation

Section Total (14 out of 17)

82%

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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 institution partner	with community	organisations to	promote planetary	and
health?				

Yes, the **institution** meaningfully partners with **multiple** community organisations to promote planetary and environmental health. (3 points)

Yes, the **institution** meaningfully partners with **one** community organisation to promote planetary and environmental health. (2 points)

The **institution** does not partner with community organisations, but has participating in community focused events relating to planetary health. (1 point)

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

Score Assigned:

3

*Score explanation:* Yes, the institution meaningfully partners with multiple community organisations to promote planetary and environmental health including ministry of environment during rural posting

3.2. Does your	institution of	ffer comm	unity-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

The institution offers community-facing courses or events at least once every year during rural posting.

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:

2

*Score explanation:* Yes, all students regularly receive communication updates dedicated to planetary health and/or sustainable healthcare.

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:

2

Score explanation: Usmanu Danfodiyo University offers multiple in-person relating to planetary health and sustainable healthcare for post-graduate providers. E.g Masters Degree in onehealth

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

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

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

No affiliated medical centres have accessible educational materials for patients. (0 points)			
Score Assigned: 0			
No affiliated medical centres have accessible educational materials for patients.			

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

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

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

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

Score Assigned:

0

No affiliated hospitals have accessible educational materials for patients

Section Total (10 out of 14)	71%
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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.

4.1. Does your	institution offer	support for	students inte	rested in ena	cting a susta	inability
initiative/QI pr	roject?					

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

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

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

Score Assigned: 2

*Score explanation:* Yes, the institution offers funding for students to enact sustainability initiative projects as part of the core curriculum, E.g during the Trees planting program in 2024, funding was provided by the institution.

## 4.2. Does your <u>institution</u> offer opportunities for students to do research related to planetary health and/or sustainable healthcare/vetcare?

The **institution** has a **specific** research program or fellowship for students interested in doing planetary health/sustainable healthcare/vetcare research. (2 points)

There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these **require student initiative** to seek these out and carry them out in their spare time. (1 point)

There are **no opportunities** for students to engage in planetary health/sustainable healthcare research. (0 points)

Score Assigned: 2

There are research opportunities for students to perform research related to sustainable healthcare, but these require student initiative to seek these out and carry them out at their own pace.

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:* There is no institution specific webpage for locating planetary health and/or sustainable healthcare projects or mentor.

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

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

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

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

Score Assigned:

2

*Score explanation*: Yes, there is a student organisation with faculty support at my medical school dedicated to planetary health or sustainability in healthcare.

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

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

No, there is no such student representative. (0 points)

Score Assigned:	1

*Score explanation* Yes, there is a student representative that serves on an institutional decision-making committee.

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

Score explanation: yes,

- 1. Tree planting program organised by the One health institute in 2024
- 2. During the launch of Student one health Innovative Club (SOHIC) in 2024
- 3. During Usmanu Danfodiyo University Medical Student (UDUMSA) health week in 2024
- 4. During the Usmanu Danfodiyo Young antimicrobial Resistance Stewards (UDUYARS) arts exhibition in February 2025
- 5. During Usmanu Danfodiyo University Medical Student (UDUMSA) Blood Drive component of Health week in 2024.

Section Total (12 out of 15)	80%
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#### **Campus Sustainability**

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

#### 5.1. Does your institution have an Office of Sustainability?

Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is **at least one designated staff member** for sustainability at the hospital. (3 points)

There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but **no specific staff member** in charge of hospital sustainability. (2 points)

There are **no salaried sustainability staff**, but there is a sustainability task force or committee. (1 point)

There are **no** staff members **or** task force responsible for overseeing campus sustainability. (0 points)

Score Assigned:

Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. E.g the SOHIC student onehealth innovative club overseen by a faculty member

3

### 5.2. How ambitious is your <u>institution's</u> plan to reduce its own carbon footprint?

The institution has a written and approved plan to achieve carbon neutrality by 2030 (5 points)

The institution has a written and approved plan to achieve carbon neutrality by 2040 (3 points)

The institution has a stated goal of carbon neutrality by **2040** but has **not created a plan** to reach that goal or the **plan is inadequate** (1 point)

0

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

Score Assigned:

The institution/medical school does not meet any of the requirements listed above

# **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: yes. The centre for advanced medical research and training CAMRET has a 24 – hour solar panel installation.

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

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

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

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

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

Score Assigned:

3

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. E.g an ongoing diagnostic centre construction.

# 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:

0

Score explanation: The institution has **not** implemented strategies to encourage and provide

# 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:

environmentally-friendly transportation options.

2

Yes, the institution has both compost and recycling programs accessible to students and faculty. E.g the sewage treatment plant in Usmanu Danfodiyo University Sokoto

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

Yes, the institution has adequate sustainability requirements for food and beverages, including meat-free days or no red-meat, and is engaged in efforts to increase food and beverage sustainability. (3 points)

There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution **is engaged** in efforts to increase food and beverage sustainability. (2 points)

There are sustainability guidelines for food and beverages, but they are **insufficient or optional.** The institution is **not** engaged in efforts to increase food and beverage sustainability. (1 point)

There are **no** sustainability guidelines for food and beverages. (0 points)

Score Assigned:

There are sustainability guidelines for food and beverages, but they are insufficient. The institution is however putting in efforts to increase food and beverage sustainability

1

# 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:

1

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.

#### 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:

2

Every event hosted at the institution must abide by sustainability criteria.

# 5.10. Does your <u>institution</u> have programs and initiatives to assist with making lab spaces more environmentally sustainable?

Yes, the institution has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable. (2 points)

There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)

There are **no** efforts at the institution to make lab spaces more sustainable. (0 points)

Score Assigned:

1

Score explanation: There was an initial guideline and adherence to the guidelines. However, it is not fully adhered to anymore because of increased student quota.

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

Section Total (14 out of 32)	44%
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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%

<sup>\*</sup>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 Usmanu Danfodiyo University college of health science The following table presents the individual section grades and overall institutional grade for the Usmanu Danfodiyo University college of health science [on this medical-school-specific Planetary Health Report Card.

Section	Raw Score %	Letter Grade	
Planetary Health Curriculum (30%)	$(71/72) \times 100 = 99\%$	A	
Interdisciplinary Research (17.5%)	$(12/17) \times 100 = 82\%$	Α	
Community Outreach and Advocacy (17.5%)	$(10/14) \times 100 = 71\%$	В	
Support for Student-led Planetary Health Initiatives (17.5%)	(12/15) x 100= 80%	A	
Campus Sustainability (17.5%)	$(14/32) \times 100 = 44\%$	С	
Institutional Grade	(99x0.3 + 82x0.175 + 71x0.175 + 80x0.175 + x0.175) = 78%	В	

Year	Overall (%)	Curriculum (%)	Interdisciplinary Research (%)	Community Outreach & Advocacy (%)	Support for Student-Led Initiatives (%)	Campus Sustainability (%)
2024-25	78	99	82	71	80	44

#### **Report Card Trends**

#### **Section Overview**

This graph demonstrates trends in overall and section grades for the years in which [USMANU DANFODIYO UNIVERSITY] has participated in the Planetary Health Report Card initiative.

#### Planetary Health Report Card Trends for Unsmanu Danfodiyo University Sokoto

