



Planetary Health Report Card (Medicine):

*Loyola University Chicago
Stritch School of Medicine*



2023-2024 Contributing Team:

- Students: Megan Bollinger*, Sonya Dexter, Taylor Drew, Amanda Sifferlen
- Faculty Mentors: Justin Hoch
- *Primary Contact: Megan Bollinger, mbollinger1@luc.edu

Summary of Findings

Overall	B-
<u>Curriculum</u>	C-
- Loyola University Chicago (LUC) Stritch School of Medicine (SSOM) continued to improve the for-credit elective CCGH-250 focused on planetary health. There are several standalone lectures in the preclinical curriculum that address topics related to climate change and health, but no longitudinal integration. Recommendations: Topics of planetary health should be incorporated into the core curriculum more substantially, and such material should be included in learning objectives and test questions. The Patient Centered Medicine courses could instruct students on how to counsel patients regarding climate change health effects in clinical encounters.	
<u>Interdisciplinary Research</u>	B+
- Loyola's Public Health and School for Environmental Sustainability programs may have many climate-related research opportunities, but these projects are not made available for students in the medical school. The medical school itself offers no research opportunities specifically concerning sustainability. Recommendations: Loyola SSOM could work closely with other Loyola graduate schools to facilitate interdisciplinary opportunities. The medical school could also join the Planetary Health Alliance and the Global Consortium on Climate and Health Education.	
<u>Community Outreach and Advocacy</u>	B-
- Loyola SSOM is involved with very few community-focused environmental justice programs and opportunities for community engagement. Recommendations: Opportunities exist for interdisciplinary collaboration to initiate more community outreach events regarding planetary health and environmental issues in our surrounding community. We should establish a working relationship with Loyola Medicine and Trinity Health to provide climate health related education material to patients.	
<u>Support for Student-Led Initiatives</u>	B
- Overall, the administration has been supportive of student-led initiatives to bring broader awareness to planetary health. The school was very supportive in helping the student organization Group for Environmental Medicine and Sustainability (GEMS) initiate a for-credit elective focusing on planetary health within the institution. Recommendations: We recommend SSOM continue this support to increase student opportunities by providing grant opportunities or a student fellowship program. There should also be a medical student representative appointed to serve on curriculum decision-making councils.	
<u>Campus Sustainability</u>	B+
- Loyola University as a whole has made impressive progress in regards to institutional sustainability. We hope we can build on these advancements within the medical school to meet sustainability goals and lessen the healthcare sector's impact on the climate crisis. Recommendations: There is still much to improve within the SSOM campus sustainability. Goals and plans are already in place at the Medical School, especially in transportation and buildings, but we also recommend making lab spaces more sustainable and improve/introduce sustainable guidelines for events and procurement. There should be some effort made to reach out to the medical center to try and institute changes within the hospital system as well.	

Statement of Purpose

Planetary health is human health.

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

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

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

Definitions & Other Considerations

Definitions:

- **Planetary Health:** is described by the Planetary Health Alliance as “the health of human civilisation and the state of the natural systems on which it depends.” For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional ‘environmental health’ examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of health professional education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term “planetary health” to satisfy the metric.
- **Sustainable Healthcare:** As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.
- **Education for Sustainable Healthcare (ESH):** is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
 1. Describe how the environment and human health interact at different levels.
 2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
 3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- **Medical School/Department vs. Institution:** When “Medical school” is specified in the report card, this only refers to curriculum and resources offered by the School/department of Medicine and does not include offerings from other parts of the university (e.g. undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when “institution” is specified in the report card, we are referring to the university more broadly including all of its campuses. Any resource reasonably accessible by medical students, no matter where in the institution the resource comes from or if it is

specifically targeted for medical students, can meet this metric.

- **Environmental history (Metric #19 in Curriculum Section):** This is a series of questions students are taught to ask during medical encounters that elicits patients' exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mould after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution. Please be as specific as possible when providing evidence for this metric.
- **Elective:** The word "elective" refers to an optional course or lecture series that a student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- **Core Curriculum:** This refers to taught material that is delivered to the entire cohort of students in one year.
- **Clerkship / Outreach:** This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.
- **Clinical rotation:** This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).
- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.
- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.
- **Climate justice:** The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.
- **Extractivism:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to

the historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.

- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.
- **Low socioeconomic status (SES):** An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.
- **Low and Middle-Income Countries (LMIC):** Countries that have lower degrees of economic affluence.
- **Anthropogenic:** Created through human activity
- **Marginalized communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).

Other considerations:

- If there are more than one “tracks” at your institution with two different curricula (for example, Harvard Medical School has a Pathways and HST curriculum track), you can choose to fill out a report card for each track, or fill out just one report card and average the scores received by each track in cases where the scores are different (see the 2021 Harvard or Oxford report cards as examples). Where possible please indicate the proportion of students that are on each track.

Completed in 2022 a [Literature Review by Metric](#) is available for the 2022 medicine report card metrics. We are in the process of updating this review and making it more applicable to all the disciplines. However the review serves as a rough collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

Planetary Health Curriculum

Section Overview: This section evaluates the integration of 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:	2
<i>Score explanation:</i> Loyola through Center for Community and Global Health offers CCGH-250, a 5-month elective that focuses on climate change and human health. It runs throughout both spring and fall semesters. This elective involves an hourly once-weekly meeting to either a) listen to an expert in the field lecture on a specific climate-related health topic, or b) gather to discuss current medical and scientific literature detailing the effects of climate change on various aspects of human health. https://www.luc.edu/stritch/regrec/electivecatalog/coursecatalog/centerforcommunityglobalhealth/cgh250/ Lecture topics include but are not limited to Introduction to Climate Change and Human Health & the Heat Island Effect, Climate Change and Respiratory Health, Effects of Plastics Pollution on Human Health, Toxins, Lead Poisoning, and Endocrine Disruptors, Vector-Borne Diseases and Flooding, Advocacy and Social Media, Adverse Obstetric Outcomes of Excess Heat and Air Pollution, Rad Onc and Climate Change, Mental Health and Climate Change, Access to Food in a Changing World.	

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 curriculum. (3 points)

This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	2
<i>Score explanation:</i> This topic is covered in the CCGH-250 elective as well as briefly covered in the core curriculum. The Health Systems Science course, M1 course, has a lecture on Social Determinants of Health which mentions specifically in Chicago and surrounding area health outcomes from air quality, environmental racism, and food deserts in the context of climate change https://www.lumen.luc.edu/lumen/meded/hss/homepage/course%20description.pdf The Mechanisms of Human Disease course, M2 course, briefly discusses in multiple lectures and small group worksheets asthma air quality and health index in Chicago, social determinants of health, and impacts of food deserts. https://www.lumen.luc.edu/lumen/meded/pathology/homepage/coursedescription_2023-24_1.pdf	

1.3. Does your <u>medical school</u> curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	1
<i>Score explanation:</i> Multiple lectures in elective CCGH-250 cover this topic extensively, including specialty specific discussions. Lecture topics include but are not limited to Introduction to Climate Change and Human Health & the Heat Island Effect, Climate Change and Respiratory Health, Effects of Plastics Pollution on Human Health, Toxins, Lead Poisoning, and Endocrine Disruptors, Vector-Borne Diseases and Flooding, Adverse Obstetric Outcomes of Excess Heat and Air Pollution, Rad Onc and Climate Change, Mental Health and Climate Change, Neglected Tropical Diseases.	

1.4. Does your <u>medical school</u> curriculum address the impact of climate change on the changing patterns of infectious diseases?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	

This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	1
<i>Score explanation:</i> Multiple lectures in elective CCGH-250 cover this topic extensively. Elective lecture topics include but are not limited to Introduction to Climate Change and Human Health & the Heat Island Effect, Vector-Borne Diseases and Flooding, Neglected Tropical Diseases. One required Host Pathogens lecture focuses on vector-borne diseases.	

1.5. Does your <u>medical school</u> curriculum address the respiratory health effects of climate change and air pollution?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	2
<i>Score explanation:</i> The Health Systems Science course, M1 course, has a lecture on Social Determinants of Health which mentions specifically in Chicago and surrounding area health outcomes from air quality in the context of climate change. https://www.lumen.luc.edu/lumen/meded/hss/homepage/course%20description.pdf The Mechanisms of Human Disease course, M2 course, briefly discusses in multiple lectures and small group worksheets asthma air quality and health index in Chicago as it pertains to asthma in children and the exacerbations of chronic and restrictive pulmonary pathology. https://www.lumen.luc.edu/lumen/meded/pathology/homepage/coursedescriptions_2023-24_1.pdf Additional material within the Mechanisms of Human Disease course small group session touches on Chicago specific air pollution and asthma impacts. This material was not tested on. This topic was discussed in a required lecture, Climate Change and Respiratory Health, in elective CCGH-250.	

1.6. Does your <u>medical school</u> curriculum address the cardiovascular health effects of climate change, including increased heat	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	1

Score explanation: This topic was discussed in a required lecture in the elective CCGH-250. Lecture topics include but are not limited to Introduction to Climate Change and Human Health & the Heat Island Effect, Climate Change and Respiratory Health, Effects of Plastics Pollution on Human Health, Toxins, Lead Poisoning, and Endocrine Disruptors, Adverse Obstetric Outcomes of Excess Heat and Air Pollution.

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

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

1

Score explanation: Climate anxiety and how it impacts decision making were discussed in a required lecture in the elective [CCGH-250](#). Lecture topics include but are not limited to Introduction to Mental Health and Climate Change, Climate Change, Mental Health and Psychiatry, Counseling patients to Avoid Pollutants and Advocacy for Climate Action with Health in Mind.

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

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

2

Score explanation: The M1 curriculum covers the importance of food and water security briefly in the Health Disparities lecture in the Behavioral Medicine and Development course. The Health System Science course briefly touches on food deserts in relation to climate change. This topic was included in the tested material. This topic was discussed in a required lecture in the elective CCGH-250. Elective lecture topics include but are not limited to Introduction to Climate Change and Human Health & the Heat Island Effect, Effects of Plastics Pollution on Human Health, Toxins, Lead Poisoning, and Endocrine Disruptors, Vector-Borne Diseases and Flooding, Adverse Obstetric Outcomes of Excess Heat and Air Pollution, Rad Onc and Climate Change, Mental Health and Climate Change, Neglected Tropical Diseases.

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

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

2

Score explanation: The Health Systems Science and Behavioral Health course briefly (a few slides in one lecture) featured topics involving environmental racism and the disproportionate impact of heat exposure/temperature differences, air pollution, industrialization, etc. on low SES communities and communities of color, using examples and data from different Chicago zip codes. Outside of the core curriculum, the Center for Community and Global Health department has many lectures on these topics open to all students, and Loyola Street Medicine also works with the community to provide education on these topics to students as well. This topic was also discussed in required lectures in the elective CCGH-250.

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

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

1

Score explanation: This topic was discussed in a required lecture in the elective CCGH-250. Lecture topics include but are not limited to Introduction to Climate Change and Human Health & the Heat Island Effect, Climate Change and Respiratory Health, Effects of Plastics Pollution on Human Health, Toxins, Lead Poisoning, and Endocrine Disruptors, Vector-Borne Diseases and Flooding, Advocacy and Social Media, Adverse Obstetric Outcomes of Excess Heat and Air Pollution, Rad Onc and Climate Change, Mental Health and Climate Change, Access to Food in a Changing 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. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	1
<i>Score explanation:</i> This topic was discussed extensively in a required lecture given by an OBGYN in the elective CCGH-250. Lecture topics include but are not limited to Adverse Obstetric Outcomes of Excess Heat and Air Pollution and Toxins, Lead Poisoning, and Endocrine Disruptors.	

1.12. Does your <u>medical school</u> curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	1
<i>Score explanation:</i> This topic was discussed in a required lecture in the elective CCGH-250. Lecture topics include but are not limited to Introduction to Climate Change and Human Health & the Heat Island Effect, Sustainability in Healthcare: Lessons from New Jersey, Counseling patients to Avoid Pollutants and Advocacy for Climate Action with Health in Mind, Adding Climate Change Leadership to Your Professional Life, Physician Advocacy, Climate Change and Respiratory Health, Effects of Plastics Pollution on Human Health, Toxins, Lead Poisoning, and Endocrine Disruptors, Vector-Borne Diseases and Flooding, Advocacy and Social Media, Adverse Obstetric Outcomes of Excess Heat and Air Pollution, Rad Onc and Climate Change, Mental Health and Climate Change, Access to Food in a Changing World.	

1.13. To what extent does your <u>medical school</u> emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?	
This topic was explored in depth by the core curriculum. (3 points)	
This topic was briefly covered in the core curriculum. (2 points)	
This topic was covered in elective coursework. (1 point)	
This topic was not covered. (0 points)	
Score Assigned:	1
<i>Score explanation:</i> This topic was discussed in a required lecture in the elective CCGH-250. There are also CCGH honors program lectures focusing on this topic that are open to all medical students and healthcare students at the Health Science campus. Lecture topics include but are not limited to Introduction to Climate Change and Human Health & the Heat Island Effect, Sustainability in Healthcare: Lessons from New Jersey, Counseling patients to Avoid Pollutants and Advocacy for	

Climate Action with Health in Mind, Adding Climate Change Leadership to Your Professional Life, Physician Advocacy, Climate Change and Respiratory Health, Effects of Plastics Pollution on Human Health, Toxins, Lead Poisoning, and Endocrine Disruptors, Vector-Borne Diseases and Flooding, Advocacy and Social Media, Adverse Obstetric Outcomes of Excess Heat and Air Pollution, Rad Onc and Climate Change, Mental Health and Climate Change, Access to Food in a Changing World. It should be noted almost of all of these lectures include land acknowledgments and discuss its place in discussions about the environment.

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

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

2

Score explanation: The Health Systems Science and the Behavioral Health course briefly (few slides in one lecture) featured topics involving environmental racism and the disproportionate impact of heat exposure/temperature differences, air pollution, industrialization, etc. on low SES communities and communities of color, using examples and data from different Chicago zip codes. The topic was not directly tested on. This topic was also addressed in required lectures in elective CCGH-250, Bioethics Honors, and CCGH Honors lecture topics. Lecture topics include Indigenous Medicine, Climate Crises Impacts on Vulnerable Populations, Introduction to Climate Change and Human Health & the Heat Island Effect, Sustainability in Healthcare: Lessons from New Jersey, Counseling patients to Avoid Pollutants and Advocacy for Climate Action with Health in Mind, Adding Climate Change Leadership to Your Professional Life, Physician Advocacy, Climate Change and Respiratory Health, Effects of Plastics Pollution on Human Health, Toxins, Lead Poisoning, and Endocrine Disruptors, Vector-Borne Diseases and Flooding, Advocacy and Social Media, Adverse Obstetric Outcomes of Excess Heat and Air Pollution, Rad Onc and Climate Change, Mental Health and Climate Change, Access to Food in a Changing World.

Curriculum: Sustainability

1.15. Does your medical school curriculum address the environmental and health co-benefits of a plant-based diet?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

1

Score explanation: This topic was briefly covered in Loyola SSOM's elective courses called Culinary Medicine and Nutrition in Medicine. The material was not tested. Culinary Medicine discusses the environmental impacts of meat consumption and sustainable farming practices, culinary medicine discusses the benefits of a plant based diet and its impact on industry waste. Additionally this topic was covered this year in CCGH-250 elective lecture Access to Food in a Changing World.

1.16. Does your medical school curriculum address the carbon footprint of healthcare systems?

This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)

This topic was covered in **elective** coursework. (1 point)

This topic was **not** covered. (0 points)

Score Assigned:

1

Score explanation: There is a dedicated required lecture in the elective CCGH-250 on "Health Care and the Carbon Footprint: Can we be part of the solution?". It is an indept discussion of all the ways healthcare systems contribute to their own carbon footprint and educates on possible solutions and financial incentives for healthcare institutions.

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

Waste production within healthcare clinics and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting) (1 point)	0
<i>Score explanation:</i> None of these are covered in the core curriculum.	

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 no strategies introduced for having conversations with patients about climate change. (0 points)	
Score Assigned:	1
<i>Score explanation:</i> This topic was discussed in a required lecture in the elective CCGH-250. Lecture topics include but are not limited to Counseling patients to Avoid Pollutants and Advocacy for Climate Action with Health in Mind, Adding Climate Change Leadership to Your Professional Life, Physician Advocacy, Advocacy and Social Media, Mental Health and Climate Change.	

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
<i>Score explanation:</i> In Loyola SSOM's Patient Centered Medicine course, students are trained to always ask about the occupation of the patient when taking a history with the intention to identify any occupational or environmental hazards that may be involved in the patient's health. This is assessed in our Objective Structured Clinical Examinations.	

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:	4
<i>Score explanation:</i> The student organization Group for Environmental Medicine and Sustainability (GEMS) is currently working with the Stritch administration to incorporate future opportunities involving planetary health education into the core curriculum and expand elective opportunities. Some Climate Change Elective lectures were open to all medical students and advertised to all students. The Center for Community and Global Health (CCGH) and GEMS have finalized a new Climate Scholars Program. Two students who are passionate about climate change and its impact on human and planetary health will work over their time as medical students to integrate topics concerning climate change and human health into the Loyola Stritch curriculum. This is a multi-year, longitudinal opportunity that also provides the students with experience in academic medicine, curriculum development, leadership, networking, and potential research opportunities.	

1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> curriculum?	
Planetary health/ESH topics are well integrated into the core medical school curriculum. (6 points)	
Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum. (4 points)	
Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s) . (2 points)	
There is minimal/no education for sustainable healthcare. (0 points)	
Score Assigned:	2
<i>Score explanation:</i> There is a single standalone lecture that covers topics in planetary health in the M1 curriculum, Healthcare Delivery Systems and Leadership. It discusses healthcare from a systems perspective, discussing quality improvement projects and mentions sustainable healthcare as part of an action plan. The material is not integrated into the core curriculum physiology or pathophysiology body systems lectures. The material was not explicitly tested on.	

1.22. Does your <u>medical school</u> employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?	
Yes , the medical school has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)	
No , the medical school does not have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)	
Score Assigned:	0

Score explanation: The Central Curricular Authority (CCA) is a collection of faculty and students who discuss curriculum changes annually based on student and faculty feedback throughout the year. This year as a part of a new Climate Scholars Program CCGH is initiating, there will be two representative “Climate Scholars” who will contribute to the CCA to provide climate change curricular feedback and ideas to incorporate.

Section Total (31 out of 72)

43.06%

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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
<i>Score explanation:</i> Loyola Parkinson's School of Public Health and the School for Environmental Sustainability has ongoing research and interests in planetary health , but none associated with healthcare specifically. There are interested parties in both the staff of the medical school and the students themselves, so this is a site of potential growth.	

2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your <u>institution</u>?	
There is at least one dedicated department or institute for interdisciplinary planetary health research. (3 points)	
There is not currently a department or institute for interdisciplinary planetary health research, but there are plans to open one in the next 3 years. (2 points)	
There is an Occupational and Environmental Health department , but no interdisciplinary department or institute for planetary health research. (1 points)	
There is no dedicated department or institute. (0 points)	
Score Assigned:	3

Score explanation: While Loyola University has a [School for Environmental Sustainability](#) with interdisciplinary research opportunities, there are currently no accessible opportunities across graduate schools.

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

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

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

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

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

Score Assigned:

0

Score explanation: No such process exists, and there are no efforts being made to establish a process

2.4. Does your institution 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:

3

Score explanation: Loyola's School of Environmental Sustainability has an up-to-date and comprehensive [website](#) used to inform fellow students and faculty about current research related to climate change, sustainability, and the environment. They have a list of [upcoming events](#) and some of their sustainability faculty and staff [leaders](#). Focus areas include biodiversity, environment & society, environmental health & toxicology, sustainable food systems, climate & energy. Relevant [research opportunities](#) include but are not limited to two fellowship opportunities and a graduate research fund.

2.5. Has your institution recently hosted a conference or symposium on topics related to planetary health?

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

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

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

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

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

Score Assigned:

4

Score explanation: Loyola School of Environmental Sustainability hosts an annual, week-long [Climate Change Conference](#). Past topics include “Feeding a Changing World – Climate Change and Global Food Systems”, “Climate Change and Human Health: 21st Century Challenges”, “The Intersection of Climate Change, Human Health, and Justice”, Climate refugees – Human Migration in the Era of Climate Change”. Participants heard from climate scientists, public health experts, social justice advocates, policymakers, entrepreneurs, architects, engineers, and leaders of nonprofit environmental organizations. Speakers discussed the global and local impacts of climate change and the disproportionate harm done to the most vulnerable members of society. The medical school’s GEMS student organization has hosted many guest lecturers, with Community and Global Health Honors credit, that speak on a variety of topics across climate change and human health. Students also present their “living by learning projects”, projects aimed at some climate activism of their choice they have worked on throughout the course, at a Climate Symposium at the end of the course.

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

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

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

Score Assigned:

0

Score explanation: The medical school is not a member of any such group. The student group GEMS is a member of Medical Students for a Sustainable Future.

Section Total (13 out of 17)

76.47%

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Community Outreach and Advocacy

Section Overview: This section evaluates institutional 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 participates in community focused events relating to planetary health. (1 point)	
No, there is no such meaningful community partnership. (0 points)	
Score Assigned:	3
<i>Score explanation:</i> Loyola SSOM volunteers with Project CURE Chicago , which diverts unused medical products and equipment from hospitals in the US to low-resource communities, keeping millions of items out of the landfill. ENRICH garden is also a community organization that organizes volunteering for the community garden in Maywood.	

3.2. Does your institution offer community-facing courses or events regarding planetary health?	
The institution offers community-facing courses or events at least once every year. (3 points)	
The institution offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points)	
The institution has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point)	
The institution has not offered such community-facing courses or events. (0 points)	
Score Assigned:	2
<i>Score explanation:</i> The medical school's Center for Community and Global Health (CCGH) organizes an annual community volunteering day for Maywood where the topics of access to clean water supply and cost of water access in the Maywood community were briefly addressed.	

[ENRICH garden](#) has also hosted children from the Maywood community to learn about healthy eating and growing your own produce.

3.3. Does your institution have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?

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

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

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

Score Assigned:

2

Score explanation: Loyola SSOM's GEMS student group provides monthly tips on sustainability and information on climate discussions when available. These optional guest lecture discussion sessions are advertised to the student body in the class newsletters and the Center for Community and Global Health Stritch newsletter.

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

Yes, the **institution** or **main affiliated hospital trust** offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health. (2 points)

Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers. (1 point)

There are **no** such accessible courses for post-graduate providers. (0 points)

Score Assigned:

0

Score explanation: No such courses exist.

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

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

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

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

Score Assigned:	1
<i>Score explanation:</i> Some work has been done to make asthma and environmental pollution educational pamphlets available to both Loyola Medical Center providers and patients. The pamphlets were given to Loyola providers to give to their patients and were distributed throughout the hospital center for public access.	

3.6. Does your <u>institution</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about the health impacts of climate change?	
Yes, the institution or <u>all</u> affiliated hospitals have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	1
<i>Score explanation:</i> Some health education materials from previous climate change elective students were distributed throughout Loyola Medical Center in Maywood.	

Section Total (9 out of 14)	64.29%
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Support for Student-Led Planetary Health Initiatives

Section Overview: This section evaluates institutional support for student-led planetary health initiatives, such as funding, fellowships, programming, and student groups. Planetary health is a young field and, as young people facing a future deeply shaped by climate change, students are often some of the first at an institution to engage with it. Institutions should provide support for students to engage in sustainability quality improvement (QI) initiatives, discover mentors in their area of interest, and receive funding for planetary health projects.

4.1. Does your **institution** offer support for students interested in enacting a sustainability initiative/QI project?

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

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

No, the institution **does not** offer opportunities or support for sustainability initiatives or QI projects. (0 points)

Score Assigned:

1

Score explanation: The institution encourages students to pursue nonspecific QI projects and offers resources to these students. However, the recent implementation of the Climate Scholars program, an initiative started by students in the GEMS group, works to have the institution more deliberately promote and support two students whose sole focus is addressing planetary health and medicine. This may include sustainability QI projects, such as mask recycling or compost for the medical center's cafeteria.

4.2. Does your **institution** 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:

1

Score explanation: Students at Loyola SSOM may elect to conduct research in any topic, but there are no explicit opportunities within the medical school to conduct planetary health-related research. Students must conduct research with investigators in other graduate schools, such as the School of Environmental Sustainability or the School of Public Health.

4.3. Does the institution have a webpage where students can find specific information related to planetary health and/or sustainable healthcare/vetcare activities and mentors within the institution? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.

The institution has a webpage with specific information related to planetary health or sustainable healthcare/vetcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. (2 points)

There is an institution webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the institution, 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:

1

Score explanation: Loyola's School of Environmental Sustainability has an up-to-date and comprehensive [website](#) used to inform fellow students and faculty about current research related to climate change, sustainability, and the environment. Focus areas include biodiversity, environment & society, environmental health & toxicology, sustainable food systems, climate & energy. There is no directory specifically for healthcare projects involving planetary health through the medical school only through Loyola as an institution.

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

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

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

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

Score Assigned:

2

Score explanation: Group for Environmental Medicine and Sustainability (GEMS) at Loyola SSOM is a funded and registered student-led organization with a faculty advisor. GEMS's mission is to bring awareness to the subject of climate change as it relates to human health, to take initiative and advocate for change at the local level, and to form lasting relationships with the community and educational facilities to develop future initiatives related to pertinent environmental issues. GEMS is affiliated with Medical Students for a Sustainable Future, as well as Chicago Physicians for Social Responsibility.

4.5. Is there a student liaison representing sustainability interests who serves on a <u>department or institutional</u> decision-making council to advocate for curriculum reform and/or sustainability best practices?	
Yes, there is a student representative that serves on a department or institutional decision-making council/committee. (1 points)	
No, there is no such student representative. (0 points)	
Score Assigned:	0
<i>Score explanation:</i> Currently no such liaison exists. However, future endeavors with the newly appointed Climate Scholars include having an institutional role of the Central Curricular Authority.	

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.	0
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)	1
<i>Score explanation:</i> • The student-led organization GEMS has invited experts to speak to Loyola SSOM students regarding topics in climate change, health disparities related to environmental health, local community garden members and their perspectives on climate change and food access, and how healthcare systems can improve sustainability efforts. • SSOM has a community garden Project Enrich. • A new student-led organization at Loyola SSOM called Stritch Adventurers plans outdoor day and overnight wilderness excursions for medical students. • Loyola University recently finalized participation in a community solar program where they partner with an Illinois solar farm. • There is a Wilderness Medicine interest group which hosts outdoor programs. • Loyola University Sustainability hosts many events catered to students to provide opportunities to learn, take action, and support environmental initiatives at Loyola and local and global impacts.	

Section Total (10 out of 15)	66.67%
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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 institutions, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimising environmental impact.

5.1. Does your <u>institution</u> have an Office of Sustainability?	
Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is at least one designated staff member for sustainability at the hospital. (3 points)	
There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but no specific staff member in charge of hospital sustainability. (2 points)	
There are no salaried sustainability staff , but there is a sustainability task force or committee. (1 point)	
There are no staff members or task force responsible for overseeing campus sustainability. (0 points)	
Score Assigned:	3
<i>Score explanation:</i> Loyola University Chicago has an <u>Office of Sustainability</u> . There is one designated staff member for sustainability at the Health Science Campus, which includes the medical school. At Trinity Health, Director of Environmental Services and Transport is the sustainability point-of-contact. GEMS and climate scholars hope to connect with this staff member in the coming year.	

5.2. How ambitious is your <u>institution's</u> plan to reduce its own carbon footprint?	
The institution has a written and approved plan to achieve carbon neutrality by 2030 (5 points)	
The institution has a written and approved plan to achieve carbon neutrality by 2040 (3 points)	
The institution has a stated goal of carbon neutrality by 2040 but has not created a plan to reach that goal or the plan is inadequate (1 point)	
The institution does not meet any of the requirements listed above (0 points)	
Score Assigned:	5
<i>Score explanation:</i> Loyola SSOM adopted Loyola University Chicago's Climate Action plan in 2015 to reach carbon neutrality and purchase 100% renewable energy by 2025.	

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:

3

Score explanation: Loyola as an institution is technically 100% powered by renewable energy in terms of electricity. They work with a solar developer in Illinois, Double Black Diamond Solar. Story here (confirmed in effect by Sustainability Office):
<https://loyolaphoenix.com/2023/10/loyolas-double-black-diamond-solar-farm-project-to-go-live-by-2025/>

Currently, the institution is utilizing market natural gas, and has plans for decarbonization. The institution is buying carbon offsets from TradeWater in the meantime.

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

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

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

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

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

Score Assigned:

3

Score explanation: Loyola's [Nursing School](#) and [CTRE](#) on the Health Sciences Campus were sustainably built and earned LEED Gold. The Cuneo Center, where the medical school is located, has been retrofitted along with some energy efficient changes to the Fitness Center. Two buildings, Cancer Research and Maguire Center, have had some changes but have yet to be fully retrofitted due to possible plans to tear them down to create new buildings, which would both be built up to code LEED Gold.

5.5. Has the institution 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:

1

Score explanation: Loyola SSOM offers public transportation through the Loyola Medicine hospital system, from the parking garages and train station to the hospital or medical school campus. Major blue line service cuts also impacted the accessibility of our campus. Loyola as an institution does not contract the Shuttles on the Health Science Campus, those shuttles are outside contracts enlisted by Trinity Health through Loyola Medical Center. Loyola Lakeshore Campus is working towards 100% Biodiesel shuttles and running Air quality tests. For the future, it might be advisable to request the institution contract their own shuttle system for the Health Science campus, thereby controlling the carbon footprint and accessibility for its students. Due to expenses, this does not seem to be a viable option for the future. Hope is placed in improving infrastructure and public transportation accessibility in the surrounding Maywood area. The sustainability team has instituted a bike to work challenge at the Health Science Campus and is working on a trail study within the surrounding area, <https://activetrans.org/dprt/>.

5.6. Does your institution have an organics recycling program (compost) and a conventional recycling program (aluminium/paper/plastic/glass)?

Yes, the institution has **both** compost **and** recycling programs accessible to students and faculty. (2 points)

The institution has **either** recycling **or** compost programs accessible to students and faculty, but not both. (1 point)

There is **no** compost or recycling program at the institution. (0 points)

Score Assigned:

1

Score explanation: There is a recycling program at the medical school, although there is significant room for improvement. The staff at the Office of Sustainability are actively working on upgrading the current recycling system and implementing a compost program. In the past, they have had issues with their waste hauler, LRS, having the option of compost in Maywood. LRS has agreed to let Loyola pursue other compost organizations for the Health Science campus and plans are in place to start pre-consumer composting this year through the WasteNot Compost organization, which was started by a Loyola alum. In 2022, we installed a mask recycling bin on campus. There is a small digester in the dining hall on campus which manages a small amount of organic waste.

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

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

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

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

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

Score Assigned:

2

Score explanation: The food service and primary caterer, Handcut Foods, at Loyola's Health Science Campus, is committed to sustainable practices, although was recently bought out by a larger corporation. The medical school itself has not made any commitments regarding food, vendors, or catering. There are some discussions about decreasing plastic use within the dining hall, however, these changes will need to wait until compost options are available on a larger scale on campus.

5.8. Does the institution apply sustainability criteria when making decisions about supply procurement?

Yes, the institution has **adequate** sustainability requirements for supply procurement **and is engaged** in efforts to increase sustainability of procurement. (3 points)

There are sustainability guidelines for supply procurement, but they are **insufficient or optional**. The institution is **engaged** in efforts to increase sustainability of procurement. (2 points)

There are sustainability guidelines for supply procurement, but they are **insufficient or optional**. The institution is **not engaged** in efforts to increase sustainability of procurement. (1 point)

There are **no** sustainability guidelines for supply procurement. (0 points)

Score Assigned:

3

Score explanation: Sustainability is part of Loyola SSOM [procurement policy](#). This is a standardized part of all procurement efforts and specific efforts are applied as required (ie. to significant waste generation or energy consumption vendor classes). Sustainability at Loyola is driven by our Jesuit tradition, our service to humanity and our role as an institution of higher learning. It is embodied in an educational experience and activities that seek to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. We are committed to an inclusive process of University decision-making considering social, economic and environmental impacts and exemplified in a transformative education for our students. [Loyola's Sustainability Commitments](#) lists all the progress Loyola has made and has links to various metrics, audits, and policies.

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

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

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

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

Score Assigned:

0

Score explanation: There are no sustainability guidelines for institution events, although utilizing local businesses is encouraged.

5.10. Does your institution have programs and initiatives to assist with making lab spaces more environmentally sustainable?

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

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

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

Score Assigned:

1

Score explanation: [Loyola's GreenLabs program](#) applies to the Health Science Campus (and thus the medical school) and has developed resources and guidelines to address environmental impacts of lab spaces. The program addresses the following energy conservation and efficiency, e.g., fume hood ("shut the sash") and freezer maintenance programs, water conservation and efficiency, chemical use and disposal, materials management, e.g., green purchasing guidelines and recycling and reuse programs, and training for lab users on sustainable practices.

5.11. Does your institution's endowment portfolio investments include fossil-fuel companies?

The institution is **entirely divested** from fossil fuels **and** has made a **commitment to reinvest divested funds** into renewable energy companies or renewable energy campus initiatives. (4 points)

The institution is **entirely divested** from fossil fuels. (3 points)

The institution has **partially divested** from fossil fuel companies **or** has made a **commitment to fully divest**, but **currently** still has fossil fuel investments. (2 points)

The institution has **not divested** from fossil-fuel companies, but faculty and/or students are **conducting organised advocacy** for divestment. (1 point)

Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to change that. (0 points)

Score Assigned:	2
<i>Score explanation:</i> According to Loyola's investment policies and guidelines , the university invests based on sustainable investment principles, but the specific investment holding is not available to the public.	

Section Total (24 out of 32)	75.00%
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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 Loyola University Chicago Stritch School of Medicine

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(31/72) \times 100 = 43.06\%$	C-
Interdisciplinary Research (17.5%)	$(13/17) \times 100 = 76.47\%$	B+
Community Outreach and Advocacy (17.5%)	$(9/14) \times 100 = 64.29\%$	B-
Support for Student-led Planetary Health Initiatives (17.5%)	$(10/15) \times 100 = 66.67\%$	B
Campus Sustainability (17.5%)	$(24/32) \times 100 = 75.00\%$	B+
Institutional Grade	$(A \times 0.3 + B \times 0.175 + C \times 0.175 + D \times 0.175 + E \times 0.175) = 62.34\%$	B-

Report Card Trends

Section Overview

This graph demonstrates trends in overall and section grades for the years in which the Loyola University Chicago Stritch School of Medicine has participated in the Planetary Health Report Card initiative.

Planetary Health Report Card Trends for Loyola University Chicago Stritch School of Medicine

