

Planetary Health Report Card (Medicine): *Koç University*



2022-2023 Contributing Team:

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Summary of Findings

Overall	С
Curriculum	В
 Koç University includes planetary health in the curriculum, however planetary health related topics could be extended in the curriculum. Especially in the third, fourth and sixth years, planetary health and the effects of climate change on patients' health are discussed through lectures and the public health clerkship. Climate change's effects on marginalized populations and the unequal regional health impacts of climate change are lacking in the curriculum. Recommendations: Planetary health education should be more inclusive and this could be done by adding lectures towards the subject in the pre-clinical years. 	
Interdisciplinary Research	В
 At Koç University, there are members from faculty of medicine whose primary research focus is planetary health, and the university offers means to determine research agenda according to com needs. Even though there is no institute on planetary health research, there is an Occupational are Environmental Health Department at the university as well as a website on planetary health research during the past year, some of which were directly targeting medical students. Recommendations: Koç University may consider establishing a department on interdisciplinary health research and give more power to community members in determining research agenda. Tuniversity should also improve the website on planetary health research. 	nmunity nd carch. Koç ry health y planetary
Community Outreach and Advocacy	D
 Koc University Medical School has scarce community outreach relating to planetary health. Inst partners with some community organisations yet the medical school has no educational lectures planetary health and the institution does not provide communications about enviroment. Koc Un Hospital and American Hospital do have some online accessible educational materials for patien are no hard copied brochures or signs around the hospitals. Recommendations: More community partnerships and collaborations and active involvement of school to these activities. 	related with niversity nts yet there
Support for Student-Led Initiatives	D
 Koc University School of Medicine has 3 modes of support for student-led initiatives. It includes curriculum backed population research that looks into populations at risk for widespread diseases natural disasters. The university itself has a KWORKS and a Social Impact Lab that incubates s any field, but it doesn't have an agreement with the School of Medicine. And, there are few ever KUMSA's subsidiary KUMIM or Koc University Medicine in Motion that aim at encouraging sustainability. Recommendations: Support for student-led initiatives mostly comes from the wider Koc University than the Medical School. We recommend the medical school offers increased support to student in sustainable initiatives for example via creating a joint effort with KWORKS and the Social Impact Path and sustainability, along with designating a board member, a website, and a subsidiary for sustainability. 	es and tart-ups in nts led by ersity rather s interested npact Lab

Campus Sustainability

С

- Koç University School of Medicine has been successfully taking part in campus sustainability projects, such as providing environmentally friendly transportations, practicing recycling programs, and following building sustainability protocols. In addition, the Medical School at Koç University has future plans to improve its campus sustainability by achieving its carbon neutrality goals by 2050 and implementing renewable energy sources compatible with the faculty building.
- **Recommendations**: To improve campus sustainability, we would recommend to dedicate a group of employees in the office of sustainability to medical school specifically. So that they can lead sustainability projects only related to medical school such as creating guidelines for medical school events as well as promoting renewable energy use in the faculty building.

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 analyzing 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, urbanization, biodiversity shifts, natural disasters, climate change, changing land use and land cover, global pollution, and changing biogeochemical flows. The health of humanity is dependent on our environment, and our environment is changing rapidly and in disastrous ways. Although the World Health Organization has called climate change "the greatest threat to global health in the 21st century," many medical school's institutional priorities do not reflect the urgency of this danger to human health.

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

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

Definitions & Other Considerations

Definitions:

- Planetary Health: is described by the Planetary Health Alliance as "the health of human civilisation and the state of the natural systems on which it depends." For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional 'environmental health' examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of medical school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term "planetary health" to satisfy the metric.
- Sustainable Healthcare: As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.
- Education for Sustainable Healthcare (ESH): is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the 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 vs. Institution: When "medical school" is specified in the report card, this only refers to curriculum and resources offered by the School 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. 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 providers 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 mold 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.
- 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.
- **Clerkship:** 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 or placements.

Other considerations:

• If there are more than one "tracks" at your medical school 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).

Added to our resources this year, the Planetary Health Report Card <u>Literature</u> <u>Review by Metric</u> collates the evidence behind each of the metrics in the Planetary Health Report Card. It serves as a 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. 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?

3	Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year.
2	Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year.
1	The medical school does not have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a lecture on planetary health.
0	No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.
Score explanation: The graduate program, Master of Global Health offers the following courses: Fundamentals of Global Health which discusses climate crises for one week, and Migration and Health which discusses the climate crises as one of the reasons for migration. All the students in the university including medical students can take those courses as electives.	

Curriculum: Health Effects of Climate Change

2. Does your <u>medical school</u> curriculum address the relationship between extreme heat, health risks, and climate change?

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
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Score explanation: At the end of the Public Health Block, in the third year, there is a 1-day-long **Global Health Panel** in which the effects of extreme heat on the human body and its health risks are discussed. Panel focuses on pollution and climate change - global warming - therefore it addresses the direct effects of heat on human body and excess mortalities due to extreme weather events. It also links the climate change to drought and famine, water and food contamination. Migration happens due to water

and food insecurity and direct health effects of migration is discussed in this panel as well. Many infographics and articles are shown to the students.

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

Score explanation: As explained in the second question, it's explored in depth in the Public Health Block of the third year.

4. Does your <u>medical school</u> curriculum address the impact of climate change on the changing patterns of infectious diseases?

- 3 This topic was explored **in depth** by the **core** curriculum.
 - 2 This topic was **briefly** covered in the **core** curriculum.
- 1 This topic was covered in **elective** coursework.
- 0 This topic was **not** covered.

Score explanation: In the 4th year, during the Internal Medicine (IMED) block, one hour of "food safety" lecture is held. It explains the effects of extreme weather effects and climate change on food production. It discusses the ways that climate change leads to increased water and food contamination which leads to foodborne diseases and insufficient food production. It explains that "climate change leads to modified bacterial, viral and pathogenic contamination of water and food by altering the features of survival and transmission patterns through changing weather characteristics, such as temperature and humidity."

5. Does your <u>medical school</u> curriculum address the respiratory health effects of climate change and air pollution?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
Score explanation: In the 3 rd year curriculum:	

In the respiratory disease block, there is a lecture called: "Global climate change-air pollution and Lung Diseases". It focuses on the association between global climate change and air pollution and their effects on pulmonary diseases. In addition, it describes the role of health care professionals to minimise the adverse effects and ways of mitigation strategies.

In the public health block, there is a lecture called: "Global Warming and Health". It discusses the impacts of climate change and changing CO2 levels on health.

In the 4th year curriculum, In the lung cancer lecture, the effects of air pollution, the polluting particles and the change in their quantity over years has been discussed.

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

- 3 This topic was explored **in depth** by the **core** curriculum.
- 2 This topic was **briefly** covered in the **core** curriculum.
- 1 This topic was covered in **elective** coursework.
- 0 This topic was **not** covered.

Score explanation: As discussed in question 2, the impact of severe heat on the human body and its health hazards are reviewed at a one-day Global Health Panel that takes place at the conclusion of the Public Health Block in the third year. The panel discusses the direct impacts of heat on the human body as well as the extra deaths brought on by extreme weather events since it is focused on pollution and climate change, or global warming. Additionally, it makes connections between drought and famine, contaminated water, and food. This panel also discusses the direct health implications of migration. Migration occurs as a result of water and food shortages. The pupils see a ton of articles and infographics.

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

- 3 This topic was explored in depth by the core curriculum.
 2 This topic was briefly covered in the core curriculum.
 1 This topic was covered in elective coursework.
 - 0 This topic was **not** covered.

Score explanation: The psychological disorders lecture (year 2021, module 46) in psychology discusses this topic by starting with the vulnerability- stress model (also known as diathesis-stress model), which holds that everyone has a chance of developing a psychological disorder to some extent, whether as a result of environmental, biological, or cultural changes. It was discussed how noise pollution can cause erratic sleeping patterns, cognitive decline, and aggravated psychiatric conditions which could therefore lead to developing mental health problems. Additionally, it was also discussed how neuropsychological problems like depression, anxiety disorders, ADHD, and obsessive-compulsive disorders could be caused by human exposure to chemicals, hurricanes, storms, or harsh droughts.

8. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change? 3 This topic was explored in depth by the core curriculum. 2 This topic was briefly covered in the core curriculum. 1 This topic was covered in elective coursework. 0 This topic was not covered.

Score explanation: As discussed in question 4, during the Internal Medicine (IMED) block in the fourth year, there is a one-hour lecture on "food safety." It describes how climate change and extreme weather affect food production. Insufficient food production and foodborne illnesses are discussed as a result of how climate change increases water and food pollution. According to the explanation, "climate change modifies the properties of bacterial, viral, and pathogenic survival and transmission patterns through changing meteorological variables, such as temperature and humidity." In addition, as stated in question 6, the impact of severe heat on the human body and its health hazards are reviewed at a one-day Global Health Panel that takes place at the conclusion of the Public Health Block in the third year.

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

- 3 This topic was explored **in depth** by the **core** curriculum.
- 2 This topic was **briefly** covered in the **core** curriculum.
- 1 This topic was covered in **elective** coursework.
- 0 This topic was **not** covered.

Score explanation: At the end of the Public Health Block, in the third year, there is a 1-day-long **Global Health Panel** in which the effects of extreme heat on marginalised populations such as women, elderly (+60), patients with chronic diseases, children (younger than 1 year), and the effects of socioeconomic factors are briefly listed and explained. The socioeconomic factors that were explained include improper living conditions, no air conditioning, malnutrition, difficulty for health care access, and heavy work. In addition, the effect of climate change on patients with cardiovascular, respiratory, kidney, and diabetes was explained.

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

3 This topic was explored in depth by the core currie

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2	I his topic w	as briefly co	overed in the	core curriculum.

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

0 This topic was **not** covered.

Score explanation: The third year's Public Health Block concludes with a one-day Global Health Panel where the effects of heat waves and climate change on health are examined. There were several statistics gathered from "ClimateReanalyzer.org" that demonstrated the differences in climate between the continents of South America, North America, Africa, Europe, Asia, and Australia (with Africa having the greatest worldwide impact on climate change). Heat waves were also discussed, especially focusing on the extreme heatwave with a temperature +40°C over south Greece, Turkey, and Cyprus in 2020. In addition, the heat waves that hit the USA in 1936, Athens in 1987, Chicago in 1995, and Europe (focusing on Italy and France) in 2003, California in 2006, India in 2010, and Switzerland in 2015 were mentioned. This panel also focused on pollution and climate change - global warming - therefore it addresses the direct effects of heat on the human body and excess mortalities due to extreme weather events. It also links climate change to drought and famine, water and food contamination. Many infographics and articles are shown to the students.

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

11. Does your <u>medical school</u> curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
Score explanation: The third year's curriculum includes a block titled "Public Health" The idea of	

Score explanation: The third year's curriculum includes a block titled "Public Health". The idea of health status at the community level rather than the individual level and health metrics are discussed. Measures of well-being, criteria for determining a community's health status, evidence-based medicine for public health, prevalent health issues worldwide and in Türkiye, preventive solutions for prevalent public health issues, quality measures for health, the structure of the healthcare system, and a comparison of various health system models are some of the topics covered. It also includes the reproductive health effects of industry-related environmental toxins. This topic is also covered in the block titled "Endocrine, Reproductive & Urological Diseases" in third year. Lastly, Koç medical school's Year 4 students have a block called "Obstetrics & Gynecology", which includes Women's health, reproductive endocrinology and infertility, assisted reproduction, pregnancy, labor and delivery, normal and abnormal pregnancies, diseases of the genital organs, sexually transmitted diseases, gynecologic oncology, diagnosis and treatment of gynecologic diseases. 12. Does your <u>medical school</u> curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?

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

Score explanation: As previously mentioned, there is a lecture on "food safety" that discusses the impact of extreme weather and climate change on food production is included in the fourth-year curriculum. Also, this subject is covered in the weekly article discussion sessions that take place during the public health clerkship in the sixth year.

As discussed in question 2 and 6, severe heat and its health hazards are reviewed at a one-day Global Health Panel that takes place at the conclusion of the Public Health Block in the third year. This panel focuses on pollution and global warming. Additionally, it makes connections between drought and famine, contaminated water, and food. This panel also discusses the direct health implications of migration, which is common in the city Koc is situated in (Istanbul). The students are shown plenty of articles and infographics.

13. To what extent does your <u>medical school</u> emphasize the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?	
3	Indigenous knowledge and value systems are integrated throughout the medical school's planetary health education
2	Indigenous knowledge and value systems as essential components of planetary health solutions are included briefly in the core curriculum.
1	Indigenous knowledge and value systems as essential components of planetary health solutions are included in elective coursework.
0	This topic was not covered.

Score explanation: This topic was not covered.

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

3 This topic was explored in depth by the core curriculum.
2 This topic was briefly covered in the core curriculum.

1	This topic was covered in elective coursework.
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0 This topic was **not** covered.

Score explanation: Throughout the 6 medical years, the outsized impact of anthropogenic environmental toxins on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, Indigenous populations, and older adults is discussed. For instance, in Year 2, students were introduced to the idea that environmental factors are the second leading cause of birth defects (MEDI201 block, embryology lecture), and that those were most common in underdeveloped countries. After the introduction, whenever an anthropogenic environmental toxin is discussed, its effects are always discussed on different populations and their differences. However, 2 points were awarded because the topic is not directly mentioned in the core curriculum, although it is included in all blocks.

Curriculum: Sustainability

15. Does your <u>medical school</u> curriculum address the environmental and health co-benefits of a plant-based diet?

3 This topic was explored in depth by the core curriculum.
2 This topic was briefly covered in the core curriculum.
1 This topic was covered in elective coursework.
0 This topic was not covered.
Score explanation: The environmental and health co-benefits of a plant-based diet are not specifically

Score explanation: The environmental and health co-benefits of a plant-based diet are not specifically mentioned in the curriculum; however, since this is a crucial part of the medical world, it is mentioned all over the blocks. For instance, in Year 2, it is mentioned in MSKL202 block in the biochemistry lecture that plants are an important source of calcium, thus essential to bone development. Lifestyle and plant-based diets are important to both the environment and our health.

16. Does your <u>medical school</u> curriculum address the carbon footprint of healthcare systems?		
3	This topic was explored in depth by the core curriculum	
2	This topic was briefly covered in the core curriculum.	
1	This topic was covered in elective coursework.	
0	This topic was not covered.	
Score explanation: This topic is mentioned by some conferences, meetings and research projects in Koç		

Score explanation: This topic is mentioned by some conferences, meetings and research projects in Koç University Medical School. These conferences are prepared by dean's office and some medical student's clubs as faculty event. For instance, the conference "The Sustainability in Surgery" by Prof.Dr Dursun Buğra, includes discussions about the sustainability in surgery room and common usage of single-use plastics. In this regard, some extent of researches are planned to apply in the surgery room by professors. These researches are executed by medical students in the regard of the lecture of research project which is obligatory in the second and third year of medical school. All of medical students can join the project about carbon footprint if they are interested.

17. Does your <u>medical school</u> curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (points for each)	
2	The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment
2	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 fulfill this metric.
1	The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK.
1	Environmental impact of surgical healthcare on planetary health and the climate crisis, and how can it be mitigated
1	The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anesthesia environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions
1	The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers.
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)
	 Score explanation: At Koç University, to avoid over-medicalisation and over-investigation and differential diagnosis based investigation are emphasized during diabetes, didactic lectures and bedsides throughout clinical years. At Koç University, RPHM 406 block aims to teach how to prescribe proper medications and prevent over-prescription by determining the disease and approaching the treatment at step-wise modality. At Koç University, the importance of lifestyle changes for management and prevention of the disease especially chronic disease such as diabetus mellitus and hypertension is emphasized. Moreover, one of the core objectives in IMED 410 block is to be able to communicate about healthy behaviours and convince patient to change lifestyle such as doing sports regularly. At Koç University, bedsides and laboratory lectures aim to create awareness about single use plastic use and waste production besides their management in longterm throughout medical education.

Curriculum: Clinical Applications

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?

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

- 1 Yes, there are strategies introduced for having conversations with patients about climate change in **elective** coursework.
- 0 No, there are **not** strategies introduced for having conversations with patients about climate change

Score explanation: At Koç University, there is a lesson about global climate change and chronic obstructive pulmonary diseases. In this lecture, how climate change affects the health of the respiratory system is discussed with facts and data obtained from scientific articles. To talk with patients suffering from respiratory diseases about climate change and its effects are emphasized. However, arole-play exercise or simulation providing application, practice, and feedback do not follow the didactic session.

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

- 2 Yes, the **core** curriculum includes strategies for taking an environmental history.
- 1 Only **elective** coursework includes strategies for taking an environmental history.
- 0 No, the curriculum does **not** include strategies for taking an environmental history.

Score explanation: At Koç University throughout clinical years, students are trained to take a full history which includes asking about environmental exposure through travel, hometown, home and workplace, etc. Moreover, to mention about environmental exposure, its effect on progression of disease and change of lifestyle to prevent the exposure is emphasized through bedsides in clinical year 1.

Curriculum: Administrative Support for Planetary Health

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

- 4 Yes, the medical school is currently in the process of making **major** improvements to ESH/planetary health education.
- 2 Yes, the medical school is currently in the process of making **minor** improvements to ESH/planetary health education.
- 0 No, there are **no** improvements to planetary health education in progress.

Score explanation: There is no activity to implement or improve Education for Sustainable Healthcare (ESH)/planetary health education. There are some activites to increase awareness of sustainability; however, well-planned process was not initiated.

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

6

Planetary health/ESH topics are well integrated into the core medical school curriculum.

Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum.
 Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s).
 There is minimal/no education for sustainable healthcare.

Score explanation: Students are taught about planetary health and sustainable healthcare to some extent throughout their medical education. During the third year, students have a lecture on pulmonary health and climate change. During the clinical practice students are taught to ask patients for environmental exposures while taking the patient's medical history. In the 6th year, during the public health rotation students are taught about planetary health in classes.

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?

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

Score explanation: One member from the public health department and the vice dean in charge of education are held responsible for the incorporation of planetary health and sustainable healthcare in our curriculum.

Section Total (50 out of 72)

50

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Are there additional curriculum resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Interdisciplinary Research

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

1. Are there researchers engaged in planetary health research and healthcare sustainability research at your <u>medical school</u>?

- 3 Yes, there are faculty members at the **medical school** who have a **primary r**esearch focus in planetary health **or** healthcare sustainability.
- ² Yes, there are individual faculty members at the **medical school** who are conducting research **related** to planetary health or healthcare sustainability, but it is not their primary research focus.
- 1 There are planetary health and/or healthcare sustainability researchers at the **institution**, but none associated with the medical school.
- 0 No, there are **no** planetary health and/or healthcare sustainability researchers at the **institution** or **medical school** at this time.

Score explanation: The director of Global Health MSc program at Graduate School of Health Sciences is also the head of the Department of Public Health at the School of Medicine; most of her research focuses on healthcare sustainability. Furthermore, the head of the Department of Chest Diseases conducts research on environmental pollution, especially on air pollution.

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

3	There is at least one dedicated department or institute for interdisciplinary planetary health research.
2	There is not currently a department or institute for interdisciplinary planetary health research, but there are plans to open one in the next 3 years.
1	There is an Occupational and Environmental Health department , but no interdisciplinary department or institute for planetary health research.
0	There is no dedicated department or institute.
Score explanation: There's "Occupational Health and Safety Committee" at Koç University to supervise and develop occupational health and safety practices at the university (<u>https://isg.ku.edu.tr/en/</u>). There is also a <u>Master's program</u> on Global Health within the Graduate	

School of Health Sciences but there is not a separate department or institution for research on planetary health.

3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your <u>medical school</u>?

3	Yes, there is a process in which community members impacted by climate and environmental injustice have decision-making power in the climate + environmental research agenda.
2	Yes, there is a process in which community members impacted by climate and environmental injustice advise the climate + environmental research agenda.
1	No, but there are current efforts to establish a process for community members to advise or make decisions on the research agenda.
0	There is no process, and no efforts to create such a process.
Score explanation: Koc University Social Impact Forum was founded in 2012 within Koc University as a research and practice centre on social impact. During the second and third years of medical education, the curriculum has specific time slots allocated for research activities. Students may choose to work with KUSIF during this time. They get the chance to work with vulnerable communities, and	

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

change their research and project agenda according to their needs.

3	There is an easy-to-use, adequately comprehensive website that centralizes various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities.
2	There is a website that attempts to centralize various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive.
1	The institution has an Office of Sustainability website that includes some resources related to health and the environment.
0	There is no website.

Score explanation: Koç University has a <u>website</u> dedicated to Sustainability Campus Operations. In this website, it is possible to learn about current and past projects, recyclable materials and the team conducting the projects. However, there is no information about research or funding opportunities. Effort is currently going on to establish a new, more comprehensive website.

5. Has your institution recently hosted a conference or symposium on topics related to planetary health 4 Yes, the medical school has hosted at least one conference or symposium on topics related to planetary health in the past year. 3 Yes, the institution has hosted at least one conference or symposium on topics related to planetary health in the past year.

2	Yes, the institution has hosted a conference on topics related to planetary health in the past three years.
1	The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event.
0	No, the institution has not hosted a conference on topics related to planetary health in the past three years.

Score explanation: Koç University has hosted many events during the past year related to planetary health. The SDG Action and Awareness Week 2022 (February 28-March 3, 2022), 10th International Students Symposium on Law and Global Issues (13-15th of May, 2022), and many talks on climate change such as Climate Crisis and Individual Actions (May 5th, 2022), "Aquatic Worlds of Anatolia" symposium (8-9th of December, 2022). There were also seminars aimed directly at medical students such as "Sustainability in the Operating Room" (December 23rd, 2022).

6. Is your <u>medical school</u> a member of a national or international planetary health or ESH organization?

- 1 Yes, the medical school is a member of a national or international planetary health **or** ESH organization
- 0 No, the medical school is **not** a member of such an organization

Score explanation: Koç University, with all its schools, is a member of International Sustainable Campus Network (ISCN), but the medical school itself is not a member of a planetary health organization.

Section Total (12 out of 17)

12

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Are there additional research resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Community Outreach and Advocacy

<u>Section Overview:</u> This section evaluates medical school engagement in community outreach and advocacy efforts associated with planetary health. Researching and teaching planetary health is necessary but not sufficient. It is critical that institutions also directly engage with communities most affected by environmental health harms. Although climate change is a problem largely created by those with power and resources, its impacts fall disproportionately on under-resourced populations and communities of color. Institutions should partner with local communities affected by climate change and pollution to share information about environmental health threats, advocate together for change, and provide opportunities for students to be a part of this work.

1. Does your <u>medical school</u> partner with community organizations to promote planetary and environmental health?

- ³ Yes, the **medical school** meaningfully partners with **multiple** community organizations to promote planetary and environmental health.
- 2 Yes, the **medical school** meaningfully partners with **one** community organization to promote planetary and environmental health.
- 1 The **institution** partners with community organizations, but the medical school is not part of that partnership.
- 0 No, there is **no** such meaningful community partnership.

Score explanation: Koç University is a partner of the UNIC CityLabs program which consists of ten universities which are placed in post-industrialization cities. The partnership gathers the expertise of students, academics, and citizens to tackle environmental and societal challenges of super diverse cities. Under the supervision of this program a meeting was held between the members of Koç University, civil society organisations and various city stakeholders to discuss the Resilience of Istanbul to climate change. Although this meeting was available to medicine students, the faculty of medicine plays no active role on this partnership program.

2. Does your <u>medical school</u> offer community-facing courses or events regarding planetary health?

3	The medical school offers community-facing courses or events at least once every year.
2	The medical school offers courses or events open to the community at least once per year, but they are not primarily created for a community audience.
1	The institution has offered community-facing courses or events, but the medical school was not involved in planning those courses or events.
0	The institution/medical school have not offered such community-facing courses or events.
Score explanation: There have been numerous webinars and forums regarding climate change, such as 'Climate Activism and Law' which was a webinar held by the School of Law and 'Sustainable	

Development Conference' which was organised by Koç University College of Administrative Sciences & Economics, but School of Medicine has never been in involved in planning such events.

3. Does your <u>medical school</u> have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?	
2	Yes, all students regularly receive communication updates dedicated to planetary health and/or sustainable healthcare.
1	Yes, planetary health and/or sustainable healthcare topics are sometimes included in communication updates.
0	Students do not receive communications about planetary health or sustainable healthcare.
Score explanation: Students of medicine do not receive communications related with planetary health or sustainable medicine from the school of medicine, but there has been seldom coverage of such subjects from the institutions other departments such as 'Renewable Energies and Emerging	

subjects from the institutions other departments such as 'Renewable Energies and Emerging Technologies vs Climate Change' an article which took place in Kurious. (An individual web magazine accessible to all Koç University students)

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.

- 1 Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers
- 0 There are **no** such accessible courses for post-graduate providers

Score explanation: There are no professional education activities targeting individuals post graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare accessible for post-graduate providers.

5. Does your <u>medical school</u> or its primary <u>affiliated hospital</u> have accessible educational materials for patients about environmental health exposures?	
2	Yes, all affiliated hospitals have accessible educational materials for patients.
1	Some affiliated hospitals have accessible educational materials for patients.
0	No affiliated medical centers have accessible educational materials for patients.
Score explanation: There have been patient-facing materials online making those connections between diseases and identified environmental risk factors in both <u>Koc University Hospital</u> and <u>American</u>	

Hospital websites which are access free. Both hospitals have ISO 14001 Environmental Management System Certificate.

6. Does your <u>medical school</u> or its <u>primary affiliated hospital</u> have accessible educational materials for patients about climate change and health impacts?

2 Yes, **all** affiliated hospitals have accessible educational materials for patients.

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

0 No affiliated hospitals have accessible educational materials for patients.

Score explanation: Koç University Hospital and American Hospital do not provide their patients any brochure or online materials about climate change and health impacts.

Section Total (4 out of 14)

4

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Are there additional community engagement and advocacy resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

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.

1. Does your <u>medical school</u> or your <u>institution</u> offer support for medical students interested in enacting a sustainability initiative/QI project?

- 2 Yes, the **medical school** or **institution** *either* offers grants for students to enact sustainability initiatives/QI projects *or* sustainability QI projects are part of the core curriculum.
- The **medical school** or **institution** encourages sustainability QI projects (to fulfill clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, **but** there is no student funding available and there is no requirement to participate.
- 0 No, **neither** the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects.

Score explanation: Koc University has a couple subsidiary centres and labs to enact social change, which are KWORKS and KU Social Impact Lab or KUSIF, that helps students build their own start-ups. However, these labs aren't aimed necessarily at sustainability.

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

- 2 The **institution** has a **specific** research program or fellowship for students interested in doing planetary health/sustainable healthcare research.
- 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.
- 0 There are **no opportunities** for students to engage in planetary health/sustainable healthcare research.

Score explanation: The university's medical curriculum includes a required population- focused healthcare research proposition for students to fulfil. The students work with 1 of 3 professors throughout the year and are encouraged to develop their research as much as possible. It is a requirement to fulfil the second pre-clinical year. The students are also given advisory from Public Health professors, and if the work is significant in its results, most students will be advised to publish it. However, the topic is not necessarily focused on planetary health or sustainable healthcare.

3. Does the <u>medical school</u> have a webpage where medical students can find specific information related to planetary health and/or sustainable healthcare activities and mentors within the

medical school? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.

2	The medical school has a webpage with specific information related to planetary health or sustainable healthcare that includes up-to-date information on relevant initiatives and contact information of potential mentors.
1	There is a medical school webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information.
0	There is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.
	·

Score explanation: Koc university has no website displaying projects on its website and does not provide any guidance to students on planetary health projects.

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

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

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

No, there is **not** a student organization at my institution dedicated to planetary health or sustainability in healthcare.

Score explanation: Koc university's medical faculty doesn't have any students clubs dedicated to planetary health, but it has separated clubs that fall under the umbrella club KUMSA that hold planetary health events. There is also a push by the students to start a separate club under KUMSA soon.

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

- 1 Yes, there is a student representative that serves on a medical school or institutional decision-making council/committee.
- 0 No, there is no such student representative.

Score explanation: Currently on the decision making council of KUSOM, the council is made up of professors and professionals in multiple fields not pertaining to ensuring sustainability practices or reforms be included in the curriculum.

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)	
1	Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.
1	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)
 Score explanation: Under KUMSA, KUMIM or KU Medicine in Motion has organised multiple events for outdoor activities that include hikes, biking , etc. The university also hosted multiple seminars and talks where experts in the field spoke about the importance of climate change and its effects on the current populations of the world. The events were sponsored by the KU College of Social Science. Moreove, the students are provided with the chance to learn directly from members of a local environmental justice community. Some examples include: Global Learning and Leadership for Sustainability (GLLS) track program consists of innovative curriculum that includes credit-bearing courses, workshops, talks, retreats, service-learning programs, international learning experience opportunities, projects and internships for Koç University undergraduate students. Global Engagement Institute (GEI) offers the "Global Clinical Internship" program for Koç University Medical Students with \$500 scholarship to each participant. There is a sustainability internship from GEI for Koc students. Additionally, there is a fellowship with the Dalai Lama where students submit their applications for a year long fellowship. It is awarded to stduents working on social change projects in local communities to address one or more of the following areas: Health and Well-being, Education, Social Justice, 	
	conmental Justice, Cultural Understanding, Contemplation. on Total (5 out of 15) 5
~~~~	

Back to summary page <u>here</u>

Are there additional student-led initiative resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

#### **Campus Sustainability**

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

1. Does your medical school and/or institution have an Office of Sustainability?	
3	Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is <b>at least one designated staff member</b> for sustainability at the hospital and/or medical school.
2	There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but <b>no specific staff member</b> in charge of medical school and/or hospital sustainability.
1	There are <b>no salaried sustainability staff</b> , but there is a sustainability task force or committee
0	There are <b>no</b> staff members <b>or</b> task force responsible for overseeing campus sustainability
<b>"Sus</b> susta In aa ( <b>MS</b> and I for c It is Netw	e explanation: Koç University has a well-established Office of Campus Sustainability called tainability Campus Operation (KUSCOP)" with multiple full-time staff dedicated to campus tinability and advocacy; however, there is no specific staff member in charge of the medical school. Idition to KUSCOP, there is office of "Modelling Sustainable Cross-campus Operations COP)" that is a collaboration between Koç University Rumelifeneri Campus and Siemens' Gebze Kartal manufacturing campuses. The program will focus on how to create a new sustainable model ampus operations. also worth adding that, Koç university is a member of "ISCN International Sustainable Campus vork", an organization that helps universities achieve their sustainability goals. following are the links to the websites of the two Sustainability offices: <u>https://kuscop.ku.edu.tt</u> <u>https://mscop.ku.edu.tt/</u>
2 н	ow ambitious is your institution/medical school plan to reduce its own carbon footprint?

2. How amonibus is your <u>monution/medical sensor</u> plan to reduce its own carbon rouprint.	
5	The institution/medical school has a <b>written and approved plan</b> to achieve carbon neutrality by <b>2030</b>
3	The institution/medical school has a <b>written and approved plan</b> to achieve carbon neutrality by <b>2040</b>
1	The institution/medical school has a stated goal of carbon neutrality by <b>2040</b> but has <b>not created a plan</b> to reach that goal or the <b>plan is inadequate</b>

0

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

#### Score explanation:

According to the latest "Sustainability Report" released by Koç Group and MSCOP, Koç University follows the net-zero by 2050 target of Paris Agreement. The group-wide carbon neutrality plan for Koç is as follows:

- 27% by 2030
- 49% by 2040
- Carbon neutral by 2050

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

3	Yes medical school buildings are 100% powered by renewable energy	
2	Medical school buildings source >80% of energy needs from off-site and/or on-site renewable energy.	
1	Medical school buildings source >20% of energy needs from off-site and/or on-site renewable energy.	
0	Medical school buildings source <b>&lt;20%</b> of energy needs from off-site and/or on-site renewable energy.	
Score explanation: The Koç Hospital uses solar panels as a great means to produce energy for the		

Score explanation: The Koç Hospital uses solar panels as a great means to produce energy for the hospital. In addition, the companies related to Koç Holding uses renewable energy as a partial source. However, constructing solar panels for the medical school is still in the process and the Koç University is planning to start this construction according to the results of the feasibility studies.

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

Yes, sustainable building practices are utilized for new buildings on the medical school campus and the majority of old buildings have been retrofitted to be more sustainable.
 Sustainable building practices are utilized for new buildings on the medical school campus, but most old buildings have not been retrofitted.
 Sustainable building practices are inadequately or incompletely implemented for new buildings.
 Sustainability is not considered in the construction of new buildings.
 Score explanation: Safety and sustainability of old buildings are controlled constantly. Recently, the

Score explanation: Safety and sustainability of old buildings are controlled constantly. Recently, the Medical school faculty has been renovated to meet the needs of our growing faculty as well as to maintain its safety.

Moreover, the new building projects are built within the framework of the criteria determined by the Ministry of Environment and Urbanization "Çevre ve Şehircilik Bakanlığı" in Turkey.

5. Has the <u>medical school</u> implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?

2 Yes, the medical school has implemented strategies to encourage and provide environmentally-friendly transportation options such as safe active transport, public or carpooling and these options are well-utilized by students. Alternatively, the campus is not amenable to unsustainable forms of transportation by default.		
1	1 The medical school has implemented <b>some</b> strategies to provide environmentally-friendly transportation options, but the options are <b>unsatisfactorily</b> accessible or advertised.	
0	0 The medical school has <b>not</b> implemented strategies to encourage and provide environmentally-friendly transportation options.	

Score explanation: Koç University provides the student with free shuttle transportations between the campuses and the hospital as well as additional transportation options to different districts of Istanbul. Moreover, the campus has a bus and minibus station for easy access to public transport.

6. Does your <u>medical school</u> have an organics recycling program (compost) and a conventional recycling program (aluminum/paper/plastic/glass)?

- 2 Yes, the medical school has **both** compost **and** recycling programs accessible to students and faculty.
- 1 The medical school has **either** recycling **or** compost programs accessible to students and faculty, but not both.
- 0 There is **no** compost or recycling program at the medical school.

Score explanation: Koc university has an efficient and successful recycling program. Spread throughout the campus including all of the faculties and student centers recycling bins are available. The bins are separated by colors with different colored trashbags and a short poster guide added on the walls. The bins include aluminum, plastic, glass, paper, and household (food) trash. There is not a specific compost bin however.

7. Does the <u>medical school</u> apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?		
3	Yes, the medical school has a <b>dequate s</b> ustainability requirements for food and beverages, including meat-free days or no red-meat, and <b>is engaged</b> in efforts to increase food and beverage sustainability.	
2	There are sustainability guidelines for food and beverages, but they are <b>insufficient or optional</b> . The medical school <b>is engaged</b> in efforts to increase food and beverage sustainability.	
1	There are sustainability guidelines for food and beverages, but they are <b>insufficient or optional</b> . The medical school is <b>not</b> engaged in efforts to increase food and beverage sustainability.	
0	There are <b>no</b> sustainability guidelines for food and beverages.	

Score explanation: The medical school does not actively partake in the decisions related to food and beverages. However, food and drinks are supplied locally and the restaurants and cafes found in the university are all locally sourced. In the supermarkets and grocery stores inside and around the university, the use of reusable bags is encouraged and plastic bags are offered but for a price. Water coolers are also found in the sports and student centers to promote the use of water bottles instead of plastic bottles. Regarding the food, there is always a vegetarian option available, however, meat is always found as part of the meals offered.

8. Does the <u>medical school</u> or <u>institution</u> apply sustainability criteria when making decisions about supply procurement?

- 3 Yes, the medical school has **adequate** sustainability requirements for supply procurement **and** is **engaged** in efforts to increase sustainability of procurement.
- 2 There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The medical school is **engaged** in efforts to increase sustainability of procurement.
- 1 There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The medical school is **not engaged** in efforts to increase sustainability of procurement.
- 0 There are **no** sustainability guidelines for supply procurement.

Score explanation: There are ongoing projects related to using sustainable supplies; such as the Nero Mug project. Cafe Nero is a coffee shop in the campus area. After observations, we saw that the cardboard coffee cups and holders create a huge amount of disposal. In order to decrease the amount it was not enough only to recycle them, there could be any other solution which results in less consumption of these instead of recycling. It would be solved with the usage of mugs and thermos bottles.

Other projects also include: elevator usage, remove your tray, library reuse points and more.

The universities' procurement report can be found <u>here</u>. For more informations on the projects above click <u>here</u>.

9. Are there sustainability requirements or guidelines for events hosted at the <u>medical school</u> ?			
2	Every event hosted at the medical school <b>must</b> abide by sustainability criteria.		
1	The medical school <b>strongly recommends or incentivizes</b> sustainability measures, but they are <b>not required.</b>		
0	There are <b>no</b> sustainability guidelines for medical school events.		
guide	e explanation: regarding events held at the university's medical faculty, there are not any specific elines related sustainability, single use products are usually used, however, paper cups are often , as well as, using the in-university restaurants to offer food services.		

**10.** Does your <u>medical school</u> have programs and initiatives to assist with making lab spaces more environmentally sustainable?

- 2 Yes, the medical school has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable.
- 1 There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives.
- 0 There are **no** efforts at the medical school to make lab spaces more sustainable.

Score explanation: KUSCID (Koç University İşbank Center for Infectious Diseases) has been actively planning and implementing recycling programs with separated bins dedicated for the program, as well as posters and banners supporting the program.

Moreover, regarding the excessive use of ' single - use - products' in the lab; an initiative has been created to reduce plastic laboratory supplies and replace them with metal/ reusable apparatus. Furthermore, the plastic boxes that store pipette tips are stored and accumulated to be later used for recycling.

11. Does your <u>institution's</u> endowment portfolio investments include fossil-fuel companies?			
4	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.		
3	The institution is <b>entirely divested</b> from fossil fuels.		
2	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.		
1	The institution has <b>not divested</b> from fossil-fuel companies, but faculty and/or students are <b>conducting organized advocacy</b> for divestment.		
0	Yes, the institution has investments with fossil-fuel companies and there have been <b>no efforts</b> to change that.		

Score explanation:

1. Koç Holdings owns the largest petroleum refiner in Turkey - #1 in LPG distribution -26% #2 in petroleum products distribution -19%-

2. It also invests in automobiles companies such as (Ford Otosan1/ Tofaş1/ TürkTraktör1/ Otokar1/ OtokoçOtomotiv)

However, KUSCOP (Koc university sustainability campus operations) has two major projects 'Biodiesel Production from Waste Oil' and 'Wind Energy Projects' to promote campus sustainability and decreased use of fossil fuel energy.

Moreover, a Call for student-led projects to create a low carbon and sustainable future has been started and the university is working under the vision of the paris agreement, article 6, paragraph 4a:"To promote the mitigation of greenhouse gas emissions while fostering sustainable development." The Paris Agreement, Article 6, Paragraph 4a

Section Total (15 out of 32)

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Are there additional sustainability resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

#### 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	
А	80% - 100%	
В	60% - 79%	
С	40% - 59%	
D	20% - 39%	
F	0% - 19%	

*Within each grade bracket, a score in the top 5% ( $_5$  to $_9$ %), receives a "+", and a score in the bottom 5% ( $_0$  - 4%) receives a "--". For example, a percentage score of 78% would be a B+.

#### Planetary Health Grades for the Koç University School of Medicine

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(50/72) \ge 100 = 69.4\%$	В
Interdisciplinary Research (17.5%)	(13/17) x 100 = 70.6%	В
Community Outreach and Advocacy (17.5%)	(4/14) x 100 = 28.6%	D
Support for Student-led Planetary Health Initiatives (17.5%)	(5/15) x 100= 33.3%	D
Campus Sustainability (17.5%)	(15/32) x 100 = 46.9%	С
Institutional Grade	(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 52.22%	С