

Planetary Health Report Card (Pharmacy):

Istanbul University



2024-2025 Contributing Team:

- Students: Fatıma Beyhan KARTAL, Nurefşan ÖKSÜZ,Sümeyye Eylül YILMAZ, Hakan UYSAL, Ayşe Betül DEMİR, Ayşenur ŞEN, Zehra İrem KARAARSLAN,Ayşenur ARICI
- Faculty Mentors: PROF. DR. Emine AKALIN (Head of Pharmaceutical Botany Department)

*Primary Contact: Nurefşan Öksüz, nurefsanipad3467@gmail.com

Land acknowledgment: Another important event of the "New Era" that began with the conquest of Istanbul by Mehmet the Conqueror in 1453 was the laying of the foundations of Istanbul University. Istanbul University proudly bears the distinction of being one of the first 10 universities established in Europe. Over the centuries, Istanbul University has experienced many changes ahead of its time; the only constant is its pioneering role in the scientific field.

The history of Istanbul University, one of Turkey's oldest brands dating back to 1453, is also the history of scientific education and development in Turkey.

Pharmacy education, in our country began with the "Pharmacist Class" opened within the Mekteb-i Tıbbiye-i Şahane (Military Medical School) established in Galatasaray by Sultan II.Mahmut on May 14, 1839. Education in this school was conducted in French until 1870. In 1848, the building of Mekteb-i Tıbbiye-i Şahane was completely burned down in a fire that broke out in Beyoğlu. After this fire, the school continued its education in different neighborhoods and was finally moved to the building built in Haydarpaşa in 1903.

On March 1, 1867, the Mekteb-i Tıbbiye-i Mülkiye-i Şahane (Civil Medical School) was opened in a part of the Military Medical School building. There is also a Pharmacy Class in this school. This school was later moved to the Menemenli Mustafa Pasha Mansion in Kadırga. After the establishment of Istanbul Darülfünunu in 1908, the "Pharmacist Class" was transformed into the "Eczacı Mekteb-i Alisi" and merged with the Dental School established in the same year, and was named "Darülfünun-i Osmani Eczacı ve Dişçi Mekteb-i Alisi". The upper floor of the Menemenli Mustafa Pasha Mansion was allocated to this school. However, this building, which was already in ruins, became unusable for education after a while. Upon this, the Pharmacy and Dental Schools were moved to the former Gendarmerie Command building in Beyazıt Square in 1927. This building is now the Beyazıt State Library.

Meanwhile, the 1933 University Reform was carried out. Due to the fact that the teaching program of the Pharmacy School was closer to the natural sciences than medicine, the School was separated from the Faculty of Medicine and attached to the Faculty of Science. In 1938, the duration of education was increased from 3 years to 4 years. In 1944, the school was re-attached to the Faculty of Medicine and named "Pharmacy School".

When the Military Medical School, which was teaching in the Keçecizade Fuat Pasha Mansion in Beyazıt Square, was moved to Ankara in 1947, this building was allocated to the Pharmacy School by the Council of Ministers. However, the repair of the building took 12 years and the Pharmacy School was able to move to this building in 1959. The lecturers and students of the Eczacı Mektebi, who believed that education should be made independent for better pharmacy education and the profession to be successful, and therefore separated from the Faculty of Medicine, started their initiatives to establish a Faculty of Pharmacy in 1923, but these initiatives could only be concluded in 1961. At the meeting of the Faculty of Medicine Professors Board on February 4, 1961, it was unanimously accepted to turn the Pharmacy School into a Faculty. The decision was passed by the Istanbul University Senate on November 16, 1961, and Istanbul University Faculty of Pharmacy was officially established on January 15, 1962, with the approval of the Minister of National Education. The Faculty of Pharmacy Professors Board, which met on October 17, 1963, elected Prof. Dr. Turhan Baytop as the dean. Istanbul University Faculty of Pharmacy started education with a ceremony held on November 4, 1963.

Summary of Findings

Overall Grade C+

Curriculum B+

The curriculum at Istanbul University Faculty of Pharmacy covers a range of planetary health topics. Core courses address issues such as the environmental impact of pharmaceuticals, antimicrobial resistance, and the health effects of climate change, while the mandatory Public Health course further explores environmental health. Elective courses like Biodiversity and Conservation of Medicinal Plants and Green Chemistry and Sustainability add valuable insights, and some classes discuss how climate change affects vulnerable groups. However, practical training or internship opportunities specifically focused on planetary health are currently lacking.

Recommendations:

- 1. Strengthen training on how to communicate with patients about the health effects of climate change.
- 2. Develop internship opportunities related to planetary health.

Interdisciplinary Research

C-

While Istanbul University Faculty of Pharmacy does not have a dedicated planetary health research group, some academics conduct research related to sustainability alongside their primary fields. The faculty also houses an Environmental Management Unit and a Sustainable Development Board to guide ecological initiatives.

The faculty has hosted events like the Ecology and Biodiversity Panel, contributing to discussions on environmental sustainability. However, the university is not currently a member of any national or international planetary health organizations, as no such organization exists in Turkey.

Recommendations:

- 1. Establish a dedicated interdisciplinary research group focused on planetary health and healthcare sustainability.
- 2. Strengthen collaboration with international planetary health networks to enhance research and advocacy efforts.

Community Outreach and Advocacy

 \mathbf{C}

Istanbul University collaborates with community organizations, such as Genç TEMA, to promote environmental and planetary health. Several faculty-based ecology clubs also engage students in sustainability initiatives. The university offers community-facing courses and certificate programs on topics like green transformation, agricultural sustainability, and environmental health. Additionally, the Farmaekoloji Club organizes annual panels on Biodiversity Day to raise awareness.

While sustainability topics are periodically included in university communications, there are no dedicated postgraduate programs for planetary health education. The Faculty of Medicine provides in-service training on environmental awareness and waste management, but no educational materials on the health impacts of climate change are available for patients.

Recommendations:

- 1. Develop postgraduate education programs to keep healthcare professionals updated on planetary health and sustainability.
- 2. Create accessible educational materials for patients on the health impacts of climate change.

Support for Student-Led Initiatives

A-

Istanbul University provides structural support for student clubs, including financial approvals for planned activities. Students can conduct research on planetary health and sustainability with academic support. The university maintains an online platform where students can access information on ongoing initiatives and potential mentors.

Several student-led organizations, including the Farmaekoloji Club and Genç TEMA, actively engage in sustainability advocacy and education. Additionally, co-curricular events such as sapling planting, biodiversity panels, compost workshops, and sustainability training sessions are regularly held. However, there is no specific student representative for sustainability in the decision-making committee.

Recommendations:

- 1. Establish a dedicated research or fellowship program for students interested in planetary health and sustainable healthcare.
- 2. Choose a student to represent sustainability in decision-making processes.

Campus Sustainability

C-

Istanbul University integrates sustainability through its Circular Economy Applications and Research Centre but lacks a dedicated Office of Sustainability. Renovations focus on energy efficiency and zero-carbon ventilation, though renewable energy use is still in planning. The campus has public transport and electric scooters, but there's no clear plan for sustainable commuting.

Recycling systems exist, including waste segregation and lab waste management, yet composting and food sustainability efforts are limited. While the university excels in paper reduction and "Greenest Office" initiatives, it lacks clear sustainability policies for procurement, events, and investments.

Recommendations:

- 1. Establish an Office of Sustainability to coordinate initiatives.
- 2. Implement sustainability policies for procurement, events, and investments.

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 schools' 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, 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.
- Pharmacy School/Department vs. Institution: When "Pharmacy school" is specified in the report card, this only refers to curriculum and resources offered by the School/department of pharmacy and does not include offerings from other parts of the university (e.g. undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when "institution" is specified in the report card, we are referring to

the university more broadly including all of its campuses. Any resource reasonably accessible by pharmacy students, no matter where in the institution the resource comes from or if it is specifically targeted for pharmacy students, can meet this metric.

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

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

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

Planetary Health Curriculum

<u>Section Overview:</u> This section evaluates the integration of planetary health topics into the pharmacy school curriculum. Today's pharmacy students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that pharmacy students understand planetary health issues and principles.

1.1 Does your pharmacy school curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?		
This topic was explored in depth by the core curriculum. (3 points)		
This topic was briefly covered in the core curriculum. (2 points)		
This topic was covered in elective coursework. (1 point)		
This topic was not covered. (0 points)		
Score Assigned: 2		
Impacts of extreme weather events on individual health is covered in pharmacotherapy 2 course. Especially in Asthma, COPD, allergic rhinitis and rheumatic diseases sections. Link to the Pharmacotherapy course: https://ebs.istanbul.edu.tr/home/izlencekonubaslik/?id=833545&bid=1104&birim=eczacilik_lisans_programi_(orgun_ogretim)		

1.2 Does your pharmacy school curriculum address the environmental impact of medicines in terms of their pollution, ecological impact and contamination of water systems?		
This topic was explored in depth by the core curriculum. (3 points)		
This topic was briefly covered in the core curriculum. (2 points)		
This topic was covered in elective coursework. (1 point)		
This topic was not covered. (0 points)		
Score Assigned: 3		
•		

Ecological impact, contamination of water systems and drug transportation are mentioned in pharmaceutical technology courses. In addition, contamination of water systems and cleaning of contaminated water sources were discussed under the title of 'Pharmaceutical Water' in the content of Pharmaceutical Technology 2 course.

Link to Pharmaceutical Technology 1 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833524&bid=1104&birim=eczacilik__lisans_programi__(orgun_ogretim)

Link to Pharmaceutical Technology 2 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833583&bid=1104&birim=eczacilik_lisans_programi (orgun ogretim)

Link to Pharmaceutical Technology 3 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833533&bid=1104&birim=eczacilik_lisans_programi (orgun_ogretim)

Link to Pharmaceutical Technology 4 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833594&bid=1104&birim=eczacilik__lisans_programi (orgun ogretim)

1.3 Does your pharmacy school curriculum address the health effects of pharmaceutical industry- and manufacturing-related environmental toxins?

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

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

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

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

Score Assigned:

3

Health effects of environmental toxins related to the pharmaceutical industry are covered in detail in Pharmaceutical Toxicology, Green Chemistry and Sustainability and pharmaceutical technology courses

Link to the pharmaceutical toxicology course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833560&bid=1104&birim=eczacilik_lisans_programi (orgun_ogretim)

Link to the Green Chemistry and Sustainability course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833514&bid=1104&birim=eczacilik__lisans_programi (orgun ogretim)

1.4. Does your pharmacy school curriculum address the carbon footprint of healthcare systems?

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

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

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

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

Score Assigned:

2

Green Chemistry and Sustainability course addresses carbon footprint of healthcare systems. Link to the Green Chemistry and Sustainability course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833514&bid=1104&birim=eczacilik__lisans_programi (orgun_ogretim)

1.5. Does your pharmacy school curriculum address the impact of climate change on the changing patterns of infectious diseases and increased antimicrobial resistance?

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

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

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

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

Score Assigned:

3

Pharmaceutical Microbiology course, Rational Use of Antimicrobial Agents courses cover this topic in detail.

Link to the Pharmaceutical microbiology course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833575&bid=1104&birim=eczacilik_lisans_programi (orgun_ogretim)

The content of the Rational Use of Antimicrobial Agents course is currently inaccessible. Link to the place of the course in the curriculum:

https://ebs.istanbul.edu.tr/home/dersprogram/?id=8161&birim=eczacilik (ingilizce) lisans programi (orgun_ogretim)&yil=2024

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

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

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

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

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

Score Assigned:

3

The effects of air pollution and climate changes on plants is mentioned and is also covered in detail in pharmaceutical technology courses and it is mentioned about respiratory health effects of climate change air pollution in public health course (the public health is required subject in faculty of pharmacy)

https://ebs.istanbul.edu.tr/home/izlencekonubaslik/?id=603619&bid=1104&birim=eczacilik_lisa_ns_programi_(orgun_ogretim)

1.7. Does your pharmacy school curriculum address the cardiovascular health effects of climate change, including increased heat?

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

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

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

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

Score Assigned:

0

Cardiovascular health effects of climate change are not specifically mentioned, just give several examples about this topic when cardiovascular diseases are covered in Pharmacology(Core) and Rational Drug Use(Elective) lectures.

https://ebs.istanbul.edu.tr/home/izlence/?id=833581&bid=1104&birim=eczacilik lisans programi (orgun ogretim)

https://ebs.istanbul.edu.tr/home/izlence/?id=833622&bid=1104&birim=eczacilik_lisans_programi (orgun_ogretim)

1.8. Does your pharmacy school curriculum address the relationship between climate change and allergies?

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

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

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

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

Score Assigned:

3

The effects of climate change and allergies are covered in detail in immunology courses. Especially hypersensitivity reactions section.

https://ebs.istanbul.edu.tr/home/izlencekonubaslik/?id=833584&bid=1104&birim=eczacilik__lisa_ns_programi_(orgun_ogretim)

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

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

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

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

This topic was not covered. (0 points)			
Score Assigned: 2			
These topics are addressed in the Public Health course and sociology of health course. Link to the Sociology of Health course: https://ebs.istanbul.edu.tr/home/izlencekonubaslik/?id=603619&bid=1104&birim=eczacilik_lisans_programi_(orgun_ogretim) Link to Public Health course: https://ebs.istanbul.edu.tr/home/izlencekonubaslik/?id=603619&bid=1104&birim=eczacilik_lisans_programi_(orgun_ogretim)			
1.10. Does your pharmacy school curriculum address the unequal regional health impacts of climate change nationally and globally, including the impact of social inequality?			
This topic was explored in depth by the core curr	riculum. (3 points)		
This topic was briefly covered in the core curricu	ılum. (2 points)		
This topic was covered in elective coursework. (1	This topic was covered in elective coursework. (1 point)		
This topic was not covered. (0 points)			
Score Assigned: 2			
These topics are addressed in Public Health course and sociology of health course. Link to the Sociology of Health course: https://ebs.istanbul.edu.tr/home/izlencekonubaslik/?id=603619&bid=1104&birim=eczacilik_lisans_programi_(orgun_ogretim) Link to Public Health course: https://ebs.istanbul.edu.tr/home/izlencekonubaslik/?id=603619&bid=1104&birim=eczacilik_lisans_programi_(orgun_ogretim)			
1.11 Does your pharmacy school curriculum address the relationship between climate change and social determinants of health (e.g., reduced nutritional value of food)?			
This topic was explored in depth by the core curriculum. (3 points)			
This topic was briefly covered in the core curriculum. (2 points)			
This topic was covered in elective coursework. (1 point)			
This topic was not covered. (0 points)			
Score Assigned:	2		

It is mentioned in the courses of public health and the chair of pharmacognosy. It was also taught in the elective course on food toxicology.

Link to public health course:

https://ebs.istanbul.edu.tr/home/izlencekonubaslik/?id=603619&bid=1104&birim=eczacilik_lisa_ns_programi (orgun_ogretim)

Food toxicology course and pharmacognosy lesson syllabus are not available, but you can see this courses in the curriculum in the 5th grade spring semester courses and 3rd grade fall semester courses.

https://ebs.istanbul.edu.tr/home/dersprogram/?id=1104&birim=eczacilik_lisans_programi_(org_un_ogretim)&vil=2024

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

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

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

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

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

Score Assigned:

1

The effects of Mediterranean-based and similar diets on health are emphasized in pharmacotherapy course. Nutraceuticals and food Supplements and food toxicology courses also mention this topic.

Link to the Pharmacotherapy course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833545&bid=1104&birim=eczacilik_lisans_programi_(orgun_ogretim)

The content of the Nutraceuticals and food Supplements and food toxicology courses are currently inaccessible. Link to the place of the course in the curriculum:

https://ebs.istanbul.edu.tr/home/dersprogram/?id=8161&birim=eczacilik_(ingilizce)__lisans_programi_(orgun_ogretim)&vil=2024

1.13. Does your pharmacy school curriculum cover these components of sustainable clinical practice? (1 point each)	Score
1) Waste production within the healthcare system and strategies for reducing waste in clinical activities such as single use plastic and packaging. (1 point)	1
2) Patient counselling on safe disposal of medications. For example, what can be disposed of and how to locate recycling schemes, in addition to certain drugs or drug classes that are most important to dispose of properly (e.g. hormonal contraceptives, drugs that are excreted unchanged/active metabolites). (1 point)	1

3) The impact of extreme heat, on patients on medications which can interfere with thermoregulation. (1 point)	0
4) The impact of anaesthetic gases on the healthcare carbon footprint. (1 point)	0
5) The environmental impact of pharmaceuticals and over-prescribing as a cause of climate health harm. Alternatively, teaching on de-prescribing where clinically appropriate and its environmental and health co-benefits would fulfil this metric. (1 point)	1
6) The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes for obesity. This is commonly known as social prescribing in the UK. (1 point)	1
7) The impact and benefits of benign by design pharmaceuticals through exploring medicinal chemistry concepts and/or discussing implications of excretion of active metabolites/unchanged drug products on ecological system. (1 point)	1
Score Assigned:	5

1) Waste generation within the healthcare system and strategies to reduce waste in clinical activities such as single-use plastics and packaging are addressed in Pharmaceutical Technology 1,2,3,4 courses under the heading 'packaging materials of medicines'.

Link to Pharmaceutical Technology 1 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833524&bid=1104&birim=eczacilik_lisans_program i_(orgun_ogretim)

Link to Pharmaceutical Technology 2 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833583&bid=1104&birim=eczacilik__lisans_program i (orgun ogretim)

Link to Pharmaceutical Technology 3 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833533&bid=1104&birim=eczacilik_lisans_program i_(orgun_ogretim)

Link to Pharmaceutical Technology 4 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833594&bid=1104&birim=eczacilik_lisans_program_i_(orgun_ogretim)

2) In the Green Chemistry and Sustainability elective course given by the Department of Analytical Chemistry, these topics are covered under the title of 'Green Chemistry and Sustainable Technologies in the Pharmaceutical Industry'. Link to the lecture:

https://ebs.istanbul.edu.tr/home/izlence/?id=833514&bid=1104&birim=eczacilik_lisans_program i_(orgun_ogretim)

- 3) The impact of extreme heat, on patients on medications which can interfere with thermoregulation is not mentioned in our curriculum.
- 4) The impact of anaesthetic gases on the carbon footprint of healthcare is not mentioned in our curriculum.
- 5) These topics are included in the compulsory course 'Pharmacotherapy' and elective course 'Rational Drug Use' given by the Department of Pharmacology. Link to the pharmacotherapy course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833545&bid=1104&birim=eczacilik__lisans_program i_(orgun_ogretim)

Link to the Rational Drug Use course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833622&bid=1104&birim=eczacilik__lisans_program i_(orgun_ogretim)

6) The benefits and importance of non-pharmaceutical management to patient health and the environment are addressed in Pharmacotherapy and Rational Drug Use courses.

Link to the Pharmacotherapy course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833545&bid=1104&birim=eczacilik_lisans_program i (orgun ogretim)

Link to the Rational Drug Use course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833622&bid=1104&birim=eczacilik_lisans_program_i_(orgun_ogretim)

7) In the 'Aerosols, inhaled products' lesson within the scope of the Pharmaceutical Technology 2 course, the global debate on the negative impact of compressed gases used in pMDI systems on the environment was covered and the research on formulations containing compressed gases that are less harmful to the environment was discussed. Link to the lecture:

https://ebs.istanbul.edu.tr/home/izlence/?id=833583&bid=1104&birim=eczacilik_lisans_program i_(orgun_ogretim)

1.14. Does your pharmacy school curriculum discuss the environmental implications of various dosage forms, medication delivery devices, and/or excipients?

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

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

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

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

Score Assigned:

3

Introduction to pharmaceutical technology and pharmaceutical technology 1-2-3-4 courses, and pharmaceutical biotechnology courses address this topic.

Link to Pharmaceutical Technology 1 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833524&bid=1104&birim=eczacilik lisans progra mi_(orgun_ogretim)

Link to Pharmaceutical Technology 2 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833583&bid=1104&birim=eczacilik lisans progra mi_(orgun_ogretim)

Link to Pharmaceutical Technology 3 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833533&bid=1104&birim=eczacilik lisans progra mi_(orgun_ogretim)

Link to Pharmaceutical Technology 4 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833594&bid=1104&birim=eczacilik_lisans_programi (orgun_ogretim)

Link to Pharmaceutical Biotechnology course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833558&bid=1104&birim=eczacilik__lisans_programi (orgun_ogretim)

1.15. In training for patient communication, does your pharmacy school's curriculum introduce strategies for having conversations with patients about the health effects of climate change?

Yes, there are clear and detailed strategies introduced for having conversations with patients about climate change in the core curriculum (3 points)

Yes, having conversations with patients about climate change is briefly mentioned in the core curriculum. (2 points)

Yes, there are some examples of having conversations with patients about climate change in elective coursework. (1 point)

No, there are not strategies or examples for having conversations with patients about climate change (0 points)

Score Assigned:

2

Asthma patients and patients with skin and venereal diseases are mentioned within the scope of pharmacotherapy 2 course.

https://ebs.istanbul.edu.tr/home/izlencekonubaslik/?id=833545&bid=1104&birim=eczacilik__lisa_ns_programi_(orgun_ogretim)

In addition, respiratory tract infections and skin, muscle and joint diseases are mentioned in the course of infectious diseases and their agents. (elective course)

https://ebs.istanbul.edu.tr/home/izlencekonubaslik/?id=833526&bid=1104&birim=eczacilik_lisa_ns_programi_(orgun_ogretim)

In addition, this issue is addressed in the rational use of medicines course.

Link to rational use of medicines course:

https://ebs.istanbul.edu.tr/home/izlencekonubaslik/?id=833622&bid=1104&birim=eczacilik__lisa_ns_programi_(orgun_ogretim)

In addition, this issue is addressed in the pharmaceutical technology course especially in aerosols and inhalers sections.

Link to pharmaceutical technology course:

https://ebs.istanbul.edu.tr/home/izlencekonubaslik/?id=833583&bid=1104&birim=eczacilik__lisa_ns_programi (orgun ogretim)

1.16. Does your pharmacy school curriculum guide students to consider the environmental impact of medications as a factor in addition to safety, efficacy, cost, and pill burden when comparing equivalent therapies?

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

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

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

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

Score Assigned:

3

In Pharmaceutical Technology and Rational Drug Use courses, environmental effects of drugs are also considered as a factor when comparing equivalent treatments and formulations.

Link to Pharmaceutical Technology 1 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833524&bid=1104&birim=eczacilik_lisans_programi_(orgun_ogretim)

Link to Pharmaceutical Technology 2 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833583&bid=1104&birim=eczacilik lisans progra mi_(orgun_ogretim)

Link to Pharmaceutical Technology 3 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833533&bid=1104&birim=eczacilik lisans progra mi_(orgun_ogretim)

Link to Pharmaceutical Technology 4 course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833594&bid=1104&birim=eczacilik_lisans_programi (orgun_ogretim)

Link to the Rational Drug Use course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833622&bid=1104&birim=eczacilik__lisans_programi (orgun_ogretim)

1.17. Is your pharmacy school currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?

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

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

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

Score Assigned: 4

Although the weight given to these topics in Pharmaceutical Technology, Pharmacotherapy, Pharmaceutical Biotechnology, Rational Drug Use courses has increased over the years, these topics are covered in the newly added Green Chemistry and Sustainability course and it is aimed to raise awareness of students.

Link to the Green Chemistry and Sustainability course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833514&bid=1104&birim=eczacilik lisans progra mi_(orgun_ogretim)

1.18. Does your pharmacy school have a member of faculty to incorporate planetary health and sustainable healthcare as a theme throughout the curriculum?

Yes, there is/are a member(s) of faculty whose role is directly responsible for the incorporation of planetary health and sustainable healthcare as a theme throughout the curriculum (4 points)

Yes, there is/are member(s) of faculty who are incorporating planetary health and sustainable healthcare as a theme throughout the curriculum as well as doing their principle role (2 points)

There are no members of faculty who are incorporating planetary health and sustainable healthcare as a theme throughout the curriculum (0 points)

Score Assigned:

4

There are no faculty members who are incorporating planetary health and sustainable healthcare as a theme throughout the core curriculum, however there are some excellent electives available that explore these themes. The university may benefit from introducing more planetary health teaching or more of this elective education into the core pharmacy curriculum, and by appointing a member of faculty to be responsible for supporting this integration.

Prof. Dr. Emine Akalın from the Department of Pharmaceutical Botany conducts the elective course 'Biodiversity and Conservation of Medicinal Plants', which focuses on the importance of Planetary Health, the Impact of Climate Change on Biodiversity, and the conservation of Medicinal Plants. Link to the lecture:

https://ebs.istanbul.edu.tr/home/izlence/?id=691995&bid=1104&birim=eczacilik_lisans_programi (orgun_ogretim)

'Green Chemistry and Sustainability' elective course is carried out by Prof. Dr. Sıdıka Toker from the Department of Analytical Chemistry. Link to the lecture:

https://ebs.istanbul.edu.tr/home/izlence/?id=833514&bid=1104&birim=eczacilik__lisans_programi__(orgun_ogretim)

As part of the compulsory Public Health class, environmental health and the impact of environmental health on the people are also discussed. Link to the lecture:

https://ebs.istanbul.edu.tr/home/izlence/?id=789204&bid=1104&birim=eczacilik_lisans_programi (orgun_ogretim)

The lecturers of the courses we mentioned in this section are members of our faculty's Curriculum Development Commission. As a result, they actively integrate planetary health and sustainability into the curriculum. Therefore, we have scored this metric as 4.

We have attached a link to the Curriculum Commission as evidence:

https://eczacilik.istanbul.edu.tr/tr/content/fakultemiz/komisvonlar-ve-kurullar

1.19. Does your pharmacy school curriculum offer clinical practice experiences (for example, IPPE/APPE rotations in the U.S. or placement opportunities in the UK) that allow for the exploration of planetary health topics?

There are multiple clinical practice experiences/placements that allow for direct exposure to planetary health topics. (3 points)

There is one available clinical practice experience/placement that allows for direct exposure to planetary health topics. (2 points)

There are available clinical practice experiences/placements that allow for indirect exposure to planetary health topics. (1 point)

No, there are no such clinical practice experiences/placements available through the pharmacy school. (0 points)

Score Assigned:

1

These topics are referred to in the clinical pharmacy course and a more effective learning experience is provided with the PBL (problem-based learning) system. In addition, pharmacy, hospital and industry internships and practices cover this subject in excess.

Link to the Clinical Pharmacy Course:

https://ebs.istanbul.edu.tr/home/izlence/?id=846702&bid=8161&birim=eczacilik_(ingilizce)__lisa_ns_programi__(orgun_ogretim)

1.20. Does your pharmacy school curriculum acknowledge a disparity in the effects of climate change? Specifically, does your curriculum address groups more vulnerable to environmental impacts, such as BIPOC, immigrant groups, low income populations, children, elderly, persons with disabilities, persons with pre-existing or chronic medical conditions?

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

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

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

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

Score Assigned:

2

This topic is briefly covered in pharmacology, pharmacotherapy, rational drug use and pharmaceutical care courses.

Link to the Pharmacotherapy course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833545&bid=1104&birim=eczacilik__lisans_programi (orgun_ogretim)

Link to the Rational Drug Use course:

https://ebs.istanbul.edu.tr/home/izlence/?id=833622&bid=1104&birim=eczacilik_lisans_programi__(orgun_ogretim)

Section Total (50 out of 66)

75.76%

Back to Summary Page <u>here</u>

1) ISTE Herbarium: Home to 90,000 plant specimens, 75% of the plant diversity in Turkiye and 90% of Istanbul and its surroundings.

Istanbul University Faculty of Pharmacy Herbarium is a university herbarium and its foundation dates back to 1945. This herbarium, which was created by collecting samples of medicinal plants of Turkey in the Pharmacognosy Chair in the Pharmacy School of the Faculty of Medicine, was

transferred to this chair with 7760 plant samples after the establishment of the Pharmaceutical Botany Chair in 1964.

Today, the herbarium, which carries out its activities under the Department of Pharmaceutical Botany, was renamed ISTE in 1956 with its international code. Approximately 95% of the dried plant specimens in ISTE, where medicinal plants are well represented due to its location within the Faculty of Pharmacy and Istanbul and Thrace plants are well represented due to its location, are specimens collected from Turkey.

ISTE herbarium has a rich collection in terms of families such as Papaveraceae, Labiatae, Liliaceae, Solanaceae, Scrophulariaceae, Apocynaceae, Malvaceae, Rhamnaceae where medicinal plants are dense. The collection of around 90.000 dried plant specimens includes 87 typuses (first named species specimens) and 122 photographs of type specimens and all monotypic (single species) endemic genera in the flora of Turkey. In addition, genera such as Allium, Arum, Asphodeline, Colchicum, Crocus, Cyclamen, Euphorbia, Ferulago, Helichrysum, Hypericum, Iris, Papaver, Rosa, Salvia, Sedum, Tulipa are represented by a large number of species in ISTE as they are collected for systematic or chemical studies.

It was published by Prof. P. H. Davis in 9 volumes between 1965-1985.

ISTE Web Site: https://iste.istanbul.edu.tr/tr/

2) A detailed research on the Honey Plants of Istanbul was carried out by academicians from Pharmaceutical Botany at the Faculty of Pharmacy and a Honey Plants Herbarium was established at the Faculty.

As a result of a ten-year study in Turkey, 122 ÖBAs (Important Plant Areas) were identified in the early 2000s with the co-operation of approximately 40 scientists and experts from 20 universities. These areas, which were determined based on scientific research and international ÖBA criteria, were published in the book '122 Important Plant Areas of Turkey' in 2005. In this book, the botanical, geographical and geological characteristics of 122 ÖBAs were presented to the public with maps and photographs and the dangers they face were pointed out. Soon afterwards, 22 more ÖBAs were identified in 10 provinces in eastern Turkey where the Baku-Tbilisi-Ceyhan (BTC) Oil Pipeline passes through.

Researchs: https://iste.istanbul.edu.tr/tr/content/bilimsel-calismalar/kitaplar

Herbarium: https://iste.istanbul.edu.tr/tr/content/koleksiyonlar/balli-bitkiler-herbaryumu

Protecting Plants:

https://iste.istanbul.edu.tr/tr/content/turkive-bitkileri-ve-korunmasi/istanbul'un-balli-bitkileri

3) There is an Ethnobotanical collection is located in the Faculty of Pharmacy.

https://iste.istanbul.edu.tr/tr/content/koleksivonlar/etnobotanik-koleksivonu

https://www.istanbul.edu.tr/tr/haber/iu-eczacilik-fakultesi-etnobotanik-koleksiyonu-kulturel-zenginligi mizi-yansitiyo-4C00370065006F003900540036003400350054006B003100

Interdisciplinary Research

<u>Section Overview:</u> 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:

2

Although there are no academics at Istanbul University Faculty of Pharmacy who work exclusively on sustainability and ecology, some academics conduct research on these topics in addition to their main fields of study. You can find the works of Prof. Dr. Emine Akalın and Assoc. Prof. Dr.Mehtap Kara at our faculty below.

https://avesis.istanbul.edu.tr/akaline/ https://avesis.istanbul.edu.tr/mehtap.kara/

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:

1

Faculty has an Environmental Management Unit:

https://eczacilik.istanbul.edu.tr/en/content/faculty/commissions-and-councils

There are centers affiliated to the university rectorate. Some of them can be accessed from the links below:

https://bibum.istanbul.edu.tr/tr/

https://naturaldrugs.istanbul.edu.tr/tr/

https://dozem.istanbul.edu.tr/tr/

https://yesilay.istanbul.edu.tr/tr/_

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

We could not find any process or effort to create such a process at our institution. However, the faculty does have Sustainable Development Board Members.

https://eczacilik.istanbul.edu.tr/en/content/faculty/commissions-and-councils

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

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

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

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

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

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

Score Assigned:

4

Our faculty has hosted the Ecology and Biodiversity Panel in addition to the congresses and panels organized across Istanbul University. You can find more detailed information about the panels through the links below.

 $\frac{https://eczacilik.istanbul.edu.tr/tr/haber/fakultemizde-22-mayis-2024-tarihinde-duzenledigimiz-biyocesitlilik-paneli-ile-ul-46006B0074006F0032006E006C007700380033006E0039007900700046006200610041004F003200370077003200$

https://www.instagram.com/p/C7BjrbToE2Y/?igsh=MTRxaTJzMmM0cjh3YQ==

You can also access the post of the Ecology Panel, which we organized jointly with ecology clubs, from the link below.

https://www.instagram.com/p/C6ijE-voYOr/?igsh=MXE1bnRqcnFxbDZ6ag==

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

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

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

Score Assigned:

0

Planetary health organisations do not exist in Turkey. The institution is also not part of any international planetary health organisations.

Section Total (7 out of 17)

41.18%

Back to Summary Page here

Community Outreach and Advocacy

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

3.1. Does your <u>institution</u> partner with community organisations to promote planetary and 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:

1

Istanbul University cooperates with GENÇ TEMA Foundation to support environmental health and planetary health. Thanks to this cooperation, university students participate in projects that raise public awareness about environmental protection and sustainability. Students are actively involved in activities such as tree planting, raising awareness about climate change and environmental issues. These projects enable students to help the community in environmental health and take important steps towards a sustainable future.

There are Faculty of Pharmacy Farmaekoloji Club, Faculty of Economics Ecology Club, Faculty of Literature Ecology Club, Faculty of Water Sciences Ecology and Camping Club, Faculty of Dentistry Ecology Club within the Istanbul University.

3.2. Does your <u>institution</u> offer community-facing courses or events regarding planetary health?

The **institution** offers community-facing courses or events at least once every year. (3 points)

The **institution** offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points)

The institution has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point)

The institution has not offered such community-facing courses or events. (0 points)

Score Assigned:

3

Istanbul University Continuing Education Centre offers many courses and certificate programmes that aim to raise public awareness on sustainability, ecology and planetary health. Courses such as Agricultural Sustainability, Green Transformation, Sustainability Communication, Environmental Health and Safety in Businesses not only provide participants with knowledge in these areas, but also teach them how to apply this knowledge in their daily and professional lives. These trainings encourage society and organisations to take conscious steps towards a more sustainable future. https://sfk.istanbul.edu.tr/vesil-donusum-sertifika-programi
https://sfk.istanbul.edu.tr/surdurulebilirlik-iletisimi-sertifika-programi
https://sfk.istanbul.edu.tr/siletmelerde-cevre-sagligi-ve-guvenligi-egitimi-sertifika-programi
Every year, a panel is organised by the Farmaekoloji Club at the Faculty of Pharmacy on 22 May

Biodiversity.

Post of the event:

https://www.instagram.com/p/C7BjrbToE2Y/?utm_source=ig_web_copy_link&igsh=MzRlODBiN WFlZA==

Biodiversity Day. Topics discussed in 2024: Intellectual Ecology, Istanbul's Green Heritage and Natural Wonder Beykoz, If there are bees, there is life, An Evaluation on the Sustainable Use of

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

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

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

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

Score Assigned:

There are emails and information from the Rectorate in line with sustainable targets.

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

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

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

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

Score Assigned:

0

While public health courses and hydroclimatology internships can provide valuable support to students, there is currently no equivalent programme available for graduates.

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

Yes, the **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:

2

The Environmental Management Unit of Istanbul University Faculty of Medicine periodically organises in-service training programmes to raise environmental awareness and to ensure that waste management plans are implemented and acted upon correctly.

https://hastane-istanbultip.istanbul.edu.tr/tr/content/cevre-yonetim-birimi/hizmet-icin-egitimler
It has carried out social responsibility projects to raise awareness of patients and their relatives.
https://hastane-istanbultip.istanbul.edu.tr/tr/content/cevre-yonetim-birimi/sosyal-sorumluluk-projel
erimiz

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:

0

There is no access to any material related to climate change.

Section Total (7 out of 14) 50.00%	Section Total (7 out of 14)	50.00%
------------------------------------	-----------------------------	--------

Back to Summary Page <u>here</u>

Support for Student-Led Planetary Health Initiatives

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

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

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

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

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

Score Assigned:

Within 2 months from the beginning of each academic year, the Club Board of Directors submits the nature and breakdown of the activities it envisages for that year as an activity plan and the expenses it foresees in relation to this plan as a draft budget to the Unit Club Officer through the Club Advisor. The draft budget approved by the Unit Club Officer is accepted with the approval of the Director of the Student Cultural Centre (ÖKM). Approval is obtained again for activities outside the approved plan.

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

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

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

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

Score Assigned:	1
-----------------	---

There are research opportunities for students to conduct research on planetary health/sustainable health services, supported by academics, and provided with opportunities. However, there is not a specific research or fellowship program for medical or pharmacy students at this time.

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

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

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

1

Score Assigned:

University has a webpage with specific information on planetary health or sustainable healthcare/veterinary care, including up-to-date information on relevant initiatives and contact details of potential mentors.

https://avesis.istanbul.edu.tr

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

Yes, there is a student organisation **with faculty support** at my 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

Clubs are supported by counsellor academics.

Istanbul University Faculty of Pharmacy Farmaekoloj Club: It is a student club that respects the world and nature in which it lives; can act constructively, not destructively, on the existing order of nature and shows activities for a sustainable world; aims to contribute to the training of pharmacists who are conscious about the protection of medicinal plants in the professional field and their use in the future.

https://www.instagram.com/farmaekoloji?utm_source=ig_web_button_share_sheet&igsh=ZDNlZ Dc0MzIxNw==

Genç Tema: It aims to contribute to young people to become individuals who are sensitive to the problems of the environment they live in and have an ecological perspective.

https://www.instagram.com/iugenctema?utm_source=ig_web_button_share_sheet&igsh=ZDNlZD
c0MzIxNw==

Faculty of Economics Ecology Club

Faculty of Literature Ecology Club

Faculty of Water Sciences Ecology and Camping Club

Faculty of Dentistry Ecology Club

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:

(

ECZAKDER aims to improve the quality of pharmacy education in Turkey at an internationally competitive level by conducting accreditation, evaluation and information studies for pharmacy education programmes and aims to contribute to its development. ECZAKDER is an organisation that aims to continuously improve itself with its boards, various commissions and working groups. Prof.Dr. Sönmez Uydeş Doğan works in the Department of Pharmacology and is a member of ECZAKDER. https://www.eczakder.org.tr/

There is also a curriculum development commission in our faculty and you can reach this commission from the link belowhttps://eczacilik.istanbul.edu.tr/en/content/faculty/commissions-and-councils

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)	
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
2) Panels, speaker series, or similar events related to planetary health that have students as an intended audience.	1
3) 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
4) Cultural arts events, installations or performances related to planetary health that have students as an intended audience.	1

5) Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	1
6) Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1
Score Assigned:	6

1) Genç Tema club: Sapling planting activity

Faemaekoloji Club: Trip to Alibeyköy nursery and sapling planting activity

Farmaekoloji Club: Compost workshop

2)Farmaekoloji Club:22nd May Biodiversity Day panel Istanbul University Ecology Clubs: Ecology Panel Farmaekoloji Club: The E-state of Ecology

Economics and Ecology Club: Biodiversity crisis talk and zoology museum visit

3) The Environmental Pharmacists Cooperative comes to the faculty and provides training and this programme is held on a regular basis.

4) Istanbul University Ecology Club: Upcycling workshop Farmaekoloji Club: Documentary watching activities

5) Genç Tema Club: Sapling planting activity

6)Farmaekoloji Club: Ecowalk events Farmaekoloji Club :Aquarium trip

Economics Ecology Club: Urban forest trip Istanbul University Ecology Club: Canoe trip

Section Total (12 out of 15)	80.00%
------------------------------	--------

Back to Summary Page here

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 pharmacy schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimising environmental impact.

5.1. Does your institution have an Office of Sustainability?

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

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

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

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

Score Assigned:

3

There are Circular Economy Applications and Research Centre and Quality Coordinatorship within the university.

An action plan has been taken to create sustainable development in auditing, R&D.

The work is designed to increase compliance with the UN 12th development plan. Key Objectives: Academic and Applied Studies: To conduct academic research, produce scientific publications and develop practical projects on the axis of circular economy.

- Training and Awareness Activities: Organising training programmes, seminars and certified courses within the university and for the wider community.
- *University-Industry-STK Collaborations:* To develop cooperation between universities, industry and non-governmental organisations on the basis of circular economy and sustainability, and to raise awareness of savings and efficiency in society.
- International Dialogue and Collaborations: To create academic accumulation by strengthening not only national but also international collaborations in social, economic and cultural fields and to become an international centre in the long term.
- Contribution to Sustainable Future: Starting from our university, to ensure the transition of our whole country to the circular economy and to create a sustainable development model.

Istanbul University Circular Economy Unit aims to contribute to sustainable development goals with an interdisciplinary approach and to become a leading academic centre in the field of circular economy.

https://donguselekonomi.istanbul.edu.tr/tr/content/dongusel-ekonomi-birimi/birimin-amaci

5.2. How ambitious is your institution's plan to reduce its own carbon footprint?

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

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

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

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

Score Assigned:

1

In our newly constructed buildings, attention is paid to this and glass, plastic, paper, organic waste, biological waste, and hazardous waste are regularly separated. These are planned and planned from the ventilation system to the lighting in the renewed university. At the same time, our university is within the scope of zero waste. Renovations are made within the scope of 'Green Building' and designed to make the best use of sunlight.

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:

0

The whole university is currently being renovated, and the parts to be renovated are being planned to be sustainable.

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

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

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

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

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

Score Assigned:

3

In the reconstructed Faculty of Pharmacy buildings, ventilation systems are being constructed with zero carbon action in mind. At the same time, ventilation systems in laboratories are also rebuilt accordingly.

https://cdn.istanbul.edu.tr/FileHandler2.ashx?f=iu-2024-2028-stratejik-plani--son-hali--(25.10.20 23).pdf (page:92 Table:6.3)

Istanbul University Faculty of Pharmacy has been awarded the 'Spatial Accessibility Award' in 2021 and 2024.

https://eczacilik.istanbul.edu.tr/tr/haber/fakultemiz-yok-engelsiz-universite-2024-odulleri-kapsamin da-egitimde-erisim-konu-7A005F00650065006C005A0041007300630063007A0039007900700046 006200610041004F003200370077003200

https://www.istanbul.edu.tr/tr/haber/2021-engelsiz-universite-odulleri-bayrak-teslim-toreni-gerceklesti-730072004E004600530031004F006100560053004C0039007900700046006200610041004F003200370077003200

Other university buildings are being renovated in parallel.

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

Yes, the institution has implemented strategies to encourage and provide **environmentally-friendly transportation options** such as safe active transport, public transport, or carpooling and these options are well-utilised by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default. (2 points)

The institution has implemented **some** strategies to provide environmentally-friendly transportation options, but the options are **unsatisfactorily** accessible or advertised. (1 point)

The institution has **not** implemented strategies to encourage and provide environmentally-friendly transportation options. (0 points)

Score Assigned:

0

Beyazit Square, where the campus is located, is an area that can use public transportation routes such as bus-metro-tramvay as transportation, has the opportunity to use electric scooters, and its immediate surroundings are closed to traffic. The most preferred scooter and tram options are systems that reduce carbon emissions and use electric power. It represents environmentally friendly transportation within the framework of the theme of "Strategic management, Planet, People, Prosperity" with the sustainability approaches of Istanbul Metropolitan Municipality in transportation.

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

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

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

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

Score Assigned:

1

The University is included in the zero waste program. There are separate recycling bins for paper, plastic and glass inside the campus and faculties.

<u>https://eczacilik.istanbul.edu.tr/tr/content/fakultemiz/komisyonlar-ve-kurullar</u> (refer to the environmental management unit)

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

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

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

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

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

Score Assigned:

0

The university dining hall offers a "Vegan Menu" as an additional menu. No practices on food recycling, local sourcing, or reduced plastic packaging were found. There are no guidelines on this issue. https://sks.istanbul.edu.tr/yemek-listesi

5.8. Does the <u>institution</u> apply sustainability criteria when making decisions about supply procurement?

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

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

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

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

Score Assigned:

The shopping document is not available, but here is a faculty decision that should be taken as an example. As of 2024, the faculty replaced integrated education with discipline-based education. One of the main reasons for this was that there were more exams in the integrated system than in the disciplinary system. Considering the student capacity and the number of exams, the volume of waste paper was increasing with each exam and the paper could not be recycled. By changing the system, the volume of paper waste was reduced. In addition, within the scope of the "greenest office research", our university ranked 1st among the most environmentally friendly universities in Turkiye with its paperless office concept. Within the scope of this research, our university prevented the cutting down of 4,490 trees.

 $\frac{https://www.istanbul.edu.tr/tr/haber/istanbul-universitesi-en-yesil-ofis-arastirmasinda-birinci-oldu-r/100360073007A002D0042003100490069003500760039007900700046006200610041004F003200370077003200$

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:

As a department, many seminars, conferences, congresses, and workshops are organized at the Faculty of Pharmacy. No sustainability restrictions were found for these activities. At this point, we act with the principle of sustainability and zero waste awareness in our congresses, seminars, stand opening and other activities we organize as the "Farmaekoloji Club" of the faculty.

ÖKM (Student Cultural Centre) also frequently emphasises that it is within the scope of zero waste.

1

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

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

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

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

Score Assigned:

2

There is a 'Waste Management Unit' for laboratories. In cooperation with İSTAÇ, municipal hazardous wastes are disposed of and we also have our own medical waste recycling facility. In student laboratories, security, water systems, and water baths have been established for sustainable purposes. In the academic laboratories, there are studies for the distribution of other departments to the necessary projects in order to quickly evaluate the products that are approaching the end use. There are guidelines within the scope of the 'Environmental Regulation' and these guidelines are being implemented and developed.

https://cdn.istanbul.edu.tr/statics/eczacilik.istanbul.edu.tr/wp-content/uploads/2014/03/ATIK-TOPL AMA-FORMU.pdf

https://cdn.istanbul.edu.tr/statics/eczacilik.istanbul.edu.tr/wp-content/uploads/2014/03/F-M%C4%B0KROB%C4%B0YOLOJ%C4%B0-%C3%96%C4%9ERENC%C4%B0-LABORATUVARI-G%C3%9CVENL%C4%B0K-PROSED%C3%9CR%C3%9C.pdf

https://cdn.istanbul.edu.tr/statics/eczacilik.istanbul.edu.tr/wp-content/uploads/2014/03/%C3%96% C4%9ERENC%C4%B0-LABORATUVARI-G%C3%9CVENL%C4%B0K-PROSED%C3%9CR%C3 %9C.pdf

https://cdn.istanbul.edu.tr/statics/eczacilik.istanbul.edu.tr/wp-content/uploads/2014/03/K%C4%B0 MYASAL-G%C3%9CVENL%C4%B0K-FORMU.pdf

5.11. Does your <u>institution's</u> 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:

0

There is no evidence that the university has taken any initiative in this regard.

Section Total (13 out of 32)

40.63%

Grading

Section Overview

This section focuses on the grading of the report card. The institution received a grade for each of the individual sections as well as an overall institutional grade. Section point totals were tallied, divided by the total points available for the section, and converted to a percentage. The overall institutional grade is a weighted average of the section grades, with curriculum receiving a higher weight owing to its larger number of metrics. Letter grades for each section and the institution overall were then assigned according to the table below.

Letter Grade*	Percentage
A	80% - 100%
В	60% - 79%
С	40% - 59%
D	20% - 39%
F	0% - 19%

^{*}Within each grade bracket, a score in the top 5% ($_5$ to $_9\%$), receives a "+", and a score in the bottom 5% ($_0$ - $_4\%$) receives a "--". For example, a percentage score of 78% would be a B+.

Planetary Health Grades for the Istanbul University School of Pharmacy

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(50/66) \times 100 = 75.76\%$	B+
Interdisciplinary Research (17.5%)	$(7/17) \times 100 = 41.18\%$	C-
Community Outreach and Advocacy (17.5%)	(7/14) x 100 = 50.00%	С
Support for Student-led Planetary Health Initiatives (17.5%)	(12/15) x 100= 80.00%	A-
Campus Sustainability (17.5%)	$(13/32) \times 100 = 40.63\%$	C-
Institutional Grade	(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 59.79%	C+