



Sustainable Development Goals (SDGs)

### **SDG 14: Life Below Water**

Üsküdar University, established in 2011 with a focus on health, aims to educate individuals who can develop new scientific solutions for the fundamental problems and needs of humanity, particularly in the fields of behavioral sciences, engineering, and health. The university is committed to conducting its activities in an environmentally friendly manner while upholding its institutional values.

**Does Üsküdar University offer vocational training or courses that focus on the sustainability of aquatic ecosystems? Are there any awareness-raising initiatives within the community on these issues?**

Üsküdar University Vocational School of Health Services includes the "Environmental Health Program" that aims to train individuals in the field of environmental health. The curriculum covers topics such as "Water Quality and Treatment", "Ecology", and "Environmental Impact Assessment", emphasizing the importance of sustaining and conserving aquatic ecosystems, marine life, and water resources. Additionally, all programs at the university include courses on Environmental Health and Biochemical Ecology. Moreover, public information sessions and various forms of media are used to raise awareness about the significance of protecting aquatic ecosystems.



Sürdürülebilir Kalkınma İçin  
KÜRESEL AMAÇLAR

THE IMPACT  
RANKINGS 2023

**Uskudar University**  
Vocational School of Health Services  
Environmental Health

SEMESTER	COURSE UNIT CODE	COURSE UNIT TITLE	L+P	CREDIT	NUMBER OF ECTS CREDITS
3	CEV225	Water Quality and Treatment		3	

**Mode of Delivery:** Face to Face  
**Language of Instruction:** Turkish  
**Level of Course Unit:** Associate Degree  
**Work Placement(s):** No  
**Department / Program:** Environmental Health  
**Type of Course Unit:** Required  
**Objectives of the Course:** To help to understand the importance of water quality in terms of environmental health by giving detailed information about hydrological cycle, pollutant parameters and classification.  
**Teaching Methods and Techniques:** Physical Chemical Biological and Advanced Treatment Principles, hydrologic cycle, watershed concept, contaminants in surface and underground water environment, water quality classification, river pollution, lake pollution, the availability of water resources in Turkey, Water Quality Regulations and the EU Water 2 contains information in Prerequisites and co-requisites:  
**Course Coordinator:**  
**Name of Lecturers:** Asst.Prof.Dr. İsmail KARADAĞ  
**Assistants:**

**Uskudar University**  
Vocational School of Health Services  
Environmental Health

SEMESTER	COURSE UNIT CODE	COURSE UNIT TITLE	L+P	CREDIT	NUMBER OF ECTS CREDITS
4	CEV230	Ecology		2	2

**Mode of Delivery:** Face to Face  
**Language of Instruction:** Turkish  
**Level of Course Unit:** Associate Degree  
**Work Placement(s):** No  
**Department / Program:** Environmental Health  
**Type of Course Unit:** Required  
**Objectives of the Course:** To help the student understand the importance of ecology in environmental health.  
**Teaching Methods and Techniques:** Ecology, Basic Ecological Economics  
**Prerequisites and co-requisites:**  
**Course Coordinator:**  
**Name of Lecturers:** Asst.Prof.Dr. Ahmet AKOĞLU  
**Assistants:**

**Uskudar University**  
Faculty of Health Sciences  
Occupational Health and Safety

SEMESTER	COURSE UNIT CODE	COURSE UNIT TITLE	L+P	CREDIT	NUMBER OF ECTS CREDITS
2	MBF124	Environmental Health		2	2

**Mode of Delivery:** Face to Face  
**Language of Instruction:** Turkish  
**Level of Course Unit:** Bachelor's Degree  
**Work Placement(s):** No  
**Department / Program:** Occupational Health and Safety  
**Type of Course Unit:** Choice  
**Objectives of the Course:** Occupational health and safety specialists will enable students to try their business and environmental awareness of environmental factors to be arranged to help employers and workers will not cause environmental pollution requiring the  
**Teaching Methods and Techniques:** A brief history of environmental protection, environmental polluting factors, the definition and classification of solid and liquid waste, industrial waste, treatment and recycling facilities, atmosphere pollution, environmental pollution and control, environmental health and factors, workplace environment, environmental factors (chemical, physical, biological), physical environment factors (water pollution, air pollution, waste, substrate), the social environment.  
**Prerequisites and co-requisites:**  
**Course Coordinator:**

**Uskudar University**  
Vocational School of Health Services  
Environmental Health

SEMESTER	COURSE UNIT CODE	COURSE UNIT TITLE	L+P	CREDIT	NUMBER OF ECTS CREDITS
2	CEV124	Environmental Impact Assessment		2	2

**Mode of Delivery:** Face to Face  
**Language of Instruction:** Turkish  
**Level of Course Unit:** Associate Degree  
**Work Placement(s):** No  
**Department / Program:** Environmental Health  
**Type of Course Unit:** Required  
**Objectives of the Course:** To gain the theoretical knowledge about Environmental Impact Assessment, to provide the necessary information about the process Environmental Impact Assessment Reports for the activities determined by the EIA Regulation, to determine the need necessary information to the programs who will be employed in many fields including industrial activities and to contribute to the development of the projects.  
**Teaching Methods and Techniques:** Assessment of Environmental Impact Assessment, historical development of assessment duty, methods used in determining environmental impacts, assessment of EIA regulation articles, various environmental quality indicator criteria in the EIA process, Sample EIA Report forms  
**Prerequisites and co-requisites:**  
**Course Coordinator:**  
**Name of Lecturers:** Asst.Prof.Dr. Ahmet AKOĞLU  
**Assistants:**

**MBI 427 Biyokimyasal Ekoloji** **3 (3+0+0) AKTS: 5**  
Bu derste; yaşam ve ekoloji, ekolojinin temel kavramları, ekosistemler ve onların özellikleri, ekosistemlerde enerji ve madde akışı, kirlilik ve ekoloji, ekolojik biyokimyanın temel kavramları, biyokimyasal adaptasyon, aynı ve farklı türler arasındaki kimyasal ilişki, detoksifikasyon ve ilişkili metabolik yollar, biyotransformasyon ve biyodegradasyonlar, alım, biriktirme ve yoğunlaştırma kavramları ele alınacaktır.

## What are Üsküdar University's social responsibility policies regarding the environment?

Üsküdar University takes a comprehensive approach to environmental issues and has established the Environmental Ethics Forum to showcase its commitment to addressing environmental problems caused by human activities. This ethical standpoint guides all of the university's initiatives. Following the pandemic, Üsküdar University has reinforced its policies in this area by releasing the "Global Well-being Manifesto After the Pandemic."

Led by Prof. Dr. Ibrahim Ozdemir and launched in 2021, Üsküdar University has contributed to the 'Al-Mizan' World Environmental Convention, which utilizes Islamic values to enhance local, regional, and international efforts in combating climate change. The convention emphasizes the reiteration of principles that govern nature conservation in a way that tackles current challenges and stresses the ethical principles underlying the social structure of human existence. 'Al-Mizan' is endorsed by the United Nations Environment Programme (UNEP).

## Does Üsküdar University have researchers, research infrastructure, and a project incentive system focused on the sustainability and health of aquatic ecosystems, endangered biodiversity, basin management, waste reduction, and wastewater treatment?

Üsküdar University's Scientific Research Projects (SRP) Commission supports research projects and associated studies conducted within the university. The university carries out research on the sustainability of aquatic ecosystems through entities such as Üsküdar University Technology Transfer Office (BrainPark), Istanbul Protein Research Development and Innovation Center

(PROMER), Biotechnology Research Center (BIOTEKMER), and relevant laboratory facilities. Furthermore, Üsküdar University has issued the "Scientific Incentive Evaluation Directive" to motivate its faculty members to develop projects and has implemented an Activity Monitoring System to monitor ongoing projects.



At Üsküdar University, we are producing scientific publications that contribute to the sustainability of aquatic ecosystems. We have collaborated on international projects, including the MARTERA Project, working with fish farms in Turkey. All relevant scientific research conducted at the university must be approved by the Üsküdar University Non-Interventional Research Ethics Committee and the Animal Research Ethics Committee.

### **How is waste management carried out for the protection of aquatic ecosystems and human health at Üsküdar University?**

In partnership with the Istanbul Provincial Directorate of National Education, Üsküdar University organizes a Science and Ideas Festival to recognize high school students' scientific research and nurture future scientists. Projects focused on the sustainability of aquatic ecosystems are supported at the festival.

To manage waste effectively for the protection of aquatic ecosystems and human health, Üsküdar University is connected to a central water supply and sewage system overseen by the Istanbul Metropolitan Municipality and Istanbul Water and Sewerage Administration (ISKI). The university, along with its five campuses and the Afiliye Hospital NP Istanbul Brain Hospital, follows the "Regulation on the Discharge of Wastewater into Sewers" and treats discharged wastewater at municipal facilities. Liquid chemical wastes from university laboratories are classified as hazardous waste and processed in compliance with the relevant Waste Management Regulation (Fig.1).



**Fig.1** Hazardous waste management applications at the University

Üsküdar University takes an ecosystem approach to development and is working to increase green and forested areas. The establishment of the Üsküdar University Forest is currently underway. The university supports sustainable fisheries and has developed internal regulations that align with international guidelines for the consumption of seafood products on campus.

### **What is Üsküdar University's action plan to reduce plastic waste?**

In terms of reducing plastic waste, Üsküdar University supports the Ministry of Environment and Urbanization's Zero Waste Project to create a cleaner and more sustainable world for future generations. The university has implemented a Zero Waste Management System and received the "Zero Waste Certificate" from the Ministry on June 8, 2021. Additionally, Üsküdar University has implemented measures to reduce plastic consumption.

Üsküdar University, which has prioritized respect for nature since its establishment, aims to continue its activities with the same principle in all future practices and to preserve the sustainability and biodiversity of every element of the environment, especially aquatic ecosystems.