



Basic data of the subject	
POLLUTION AND ENVIRONMENTAL PROTECTION	
Academic Unit:	Faculty of Life and Environmental Sciences
Course title:	Pollution and Environmental Protection
Program:	Forest and Environmental Sciences
Level:	Bachelor
Course status:	Selective
Study year:	First year, second semester
Number of hours per week:	2+2
Credit value – ECTS:	5
Time / location:	To be announced
Lecturer:	Prof. Asoc. Dr. Albana Plakiqi Milaimi
Contact details:	Tel: +383 / 49 352 943 E-mail: albana.milaimi@umi-prizren.com
Course description:	This course is designed to provide students with a comprehensive understanding of pollution and its impact on the environment. It covers the sources, types, and consequences of pollution, as well as strategies and technologies for environmental protection. The course will equip students with the knowledge and skills necessary to analyze, address, and prevent environmental pollution.
Course objectives:	The cultivation of critical thinking skills is woven throughout the program, enabling students to analyze complex environmental challenges with a discerning eye. By engaging in real-world problem-solving scenarios, students will hone their abilities to dissect issues, evaluate evidence, and propose informed solutions. Finally, a crucial aspect of the program lies in instilling a sense of responsibility – both individual and collective – for environmental protection. Through reflective exercises, ethical discussions, and community engagement initiatives, students will develop a heightened awareness of their role in preserving the environment and contributing to a sustainable future.
Learning outcomes:	Upon completion of this course, students will be able: <ul style="list-style-type: none"> ▪ Understand the concept of pollution and its various forms. ▪ Identify and analyze the sources of environmental pollution. ▪ Examine the impact of pollution on ecosystems and human health. ▪ Explore current environmental protection policies and regulations. ▪ Evaluate and apply sustainable practices for pollution prevention. ▪ Analyze emerging technologies for environmental remediation. ▪ Develop critical thinking skills for assessing environmental challenges. ▪ Foster an awareness of individual and collective responsibility for environmental protection.



Contribution on student load (must correspond with learning outcomes)			
Activity	Hours	Days/week	Total
Lectures	2	15	30
Exercise theoretical/laboratory	2	12	24
Practice work	2	4	8
Contact with lecturer/consultations	1	5	5
Field exercises	2	3	6
Mid-terms, seminars	4	2	8
Homework	2	4	8
Individual time spent studying (at the library or home)	2	6	12
Final preparation for the exam	2	6	12
Time spent in evaluation (tests, quiz, final exam)	2	2	4
Projects, presentations, etc.	2	4	8
Total			125 hours
Teaching methods :	Lectures, Class discussions, Case studies, Group projects, Guest lectures from environmental experts, laboratory exercises, environmental exercises work, etc.		
Evaluation methods:	Students' assessment will be based on their attendance and commitment, written assignments, mid-term exam and final exam. Midterm Exam - 20%, Group Project - 25%, Class Participation and Discussions - 15%, Research Paper - 20%, Final Exam - 20%. Passability criteria are based on the decision of the Faculty Council, presented above in the Self-Evaluation Report (SER).		
Literature			
Basic Literature:	<ol style="list-style-type: none"> 1. William P. Cunningham and Mary Ann Cunningham (2021). Environmental Science: A Global Concern. 2. C. Borrego and A. I. Miranda (2016). Air Quality and Health. 3. Marcello L. Bergamaschi et al. (2018). Soil Pollution: A Hidden Reality. 4. Michael E. Kraft and Sheldon Kamieniecki (2018). Environmental Policy and Politics. 5. Speth, James Gustave, Haas, Peter (2006). Global Environmental Governance: Foundations of Contemporary Environmental Studies. 6. Case Studies and Real-World Applications: "Silent Spring" by Rachel Carson (1962). 		

	<ol style="list-style-type: none"> 7. "The Sixth Extinction: An Unnatural History" by Elizabeth Kolbert (2014). 8. Mamadou Diallo et al. (2009). Emerging Technologies: Nanotechnology Applications for Clean Water. 9. Ronald L. Crawford and Don L. Crawford. (1997). Bioremediation Principles and Applications.
<p>Additional Literature:</p>	<ol style="list-style-type: none"> 1. Dervish Rozhaja & M. Jablanovic: Pollution and Protection of environment. Prishtinë, 1980. 2. Erleta Kryeziu, Albana Milaimi (2020). Monitoring of environmental pollution with heavy metals in the woods of Drenas forests. Diploma Thesis, "Universiteti Ukshin Hoti" Prizren. 3. Albana Plakiqi Milaimi, Qerim I. Selimi, Kasum Rr.Letaj, Artan Trebicka. (2015). Lead Effect on Aminolevulinic Acid Dehydratase Acti.city of Feral Pigeon (Columba livia) in Drenas. Journal of Chemical Health Risks 5(4), 245–250. 4. Albana Plakiqi Milaimi, Qerim Selimi, Kasum Letaj, Artan Trebicka, Astrit Milaimi. ((2016) Accumulation of Heavy Metals in Feral Pigeons Living Near a Ferronickel Smelter. Pol. J. Environ. Stud. Vol. 25, No. 6, 1-5. Impact factor. 5. Leonora Çarkaj, Qerim Selimi2, Murtezan Ismaili & Albana Plakiqi Milaimi*. Monitoring of environmental pollution by heavy metal through the Roman snail (Helix pomatia) in Mitrovica-Kosovo. Carpathian Journal of Earth and Environmental Sciences, 2021, Vol. 16, No. 2, p.463 – 468; 6. Leonora Çarkaj1, Qerim Selimi2, Murtezan Ismaili1 , Albana Plakiqi Milaimi3* Roman Snail (Helix pomatia L.) as Bioindicator of Heavy Metals Pollution in Mitrovica Town, Kosovo. Ecological Engineering & Environmental Technology 2022, 23(3), 64–71.

Designed study plan:		
Week	Lectures	Exercises
<i>First week:</i>	Introduction to Pollution: Definition and types of pollution; Historical perspective on environmental pollution.	Water Quality Assessment: pH, dissolved oxygen, turbidity, and nutrient levels.
<i>Second week:</i>	Introduction to Pollution: Global and regional patterns of pollution.	Air Quality Monitoring: measure pollutants such as particulate matter, sulfur dioxide, and nitrogen oxides.
<i>Third week:</i>	Sources of Pollution: Point and non-point sources; Industrial, agricultural, and household sources	Soil Contamination Investigation: Analyze samples of soil for heavy metals, pesticides, and other pollutants.



<i>Fourth week:</i>	Sources of Pollution: Atmospheric, water, and soil pollution.	Environmental Legislation Simulation: Simulate a legislative process where students propose and debate environmental policies related to pollution control.
<i>Fifth week:</i>	Impact of Pollution: Ecosystem degradation	Waste Auditing: analyzes the composition of waste generated in a specific area.
<i>Sixth week:</i>	Impact of Pollution: Human health effects; Social and economic consequences.	Bioremediation Experiment: Using microorganisms to break down pollutants.
<i>Seventh week:</i>	Environmental Legislation and Policies: Overview of environmental laws and regulations; International agreements and protocols. Midterm exam	Renewable Energy Exploration: Explore renewable energy sources such as solar, wind, or hydropower.
<i>Eighth week:</i>	Environmental Legislation and Policies: Role of government and non-governmental organizations.	Environmental Impact Assessment: Proposed project, considering potential pollution sources and suggesting mitigation measures. Emphasize the importance of proactive planning in environmental protection.
<i>Ninth week:</i>	Pollution Prevention and Mitigation: Sustainable practices.	Environmental Data Analysis: Provide students with real environmental data sets related to pollution. Guide them in analyzing and interpreting the data to draw conclusions about pollution trends and patterns.
<i>Tenth week:</i>	Pollution Prevention and Mitigation: Waste management strategies; Renewable energy solutions.	Case Study Analysis: Love Canal case study; historical instances of pollution, impact on communities.
<i>Eleventh week:</i>	Emerging Technologies for Environmental Protection: Bioremediation.	Environmental Monitoring with Remote Sensing: technologies for environmental monitoring.
<i>Twelfth week:</i>	Emerging Technologies for Environmental Protection: Nanotechnology for pollution control; Innovative approaches to pollution reduction.	Community Pollution Awareness Campaign: design and implementation a pollution awareness campaign for a local community.
<i>Thirteenth week:</i>	Case Studies and Group Projects: Analyzing real-world environmental issues.	Environmental Health Risk Assessment
<i>Fourteenth week:</i>	Case Studies and Group Projects: Developing solutions and recommendations.	Guest Speaker Session: Environmental Practitioner.



<i>Fifteenth week:</i>	Review and Final Exam Preparation.	Field Trip: Pollution Hotspots: as industrial areas or waste treatment facilities.
Academic policies and rules of conduct:		
<ul style="list-style-type: none">▪ Students should be aware of and respect the institution and Code of ethics (English-Kodi-Etikes-per-Student.pdf (uni-prizren.com))▪ Students should respect the schedule of lectures, and exercises and be attentive.▪ It is mandatory to possess and presents a student ID card in the mid-terms and exam,▪ During the compilation of course projects, students must adhere to the instructions given by the professor.▪ During the exam is forbidden the use of mobile phones.		