

Course title: Health Safety

Course Basic Information	
Academic Unit:	Faculty of Civil Engineering
Course title:	Health Safety
Level:	Bachelor
Course Status:	Elective
Year of Study:	Year II/ Semester III
Number of Classes per Week:	2+0
ECTS Credits:	3
Time /Location:	According to the timetable
Teacher:	Naim Jerliu
Contact Details:	naim.jerliu@uni-pr.edu
Course Description:	<p>This course addresses the important topics and methodological approaches in the environmental health field. It covers specific agents (e.g., microbial agents, toxic metals, pesticides, and ionizing and nonionizing radiation) of environmentally related diseases. It explores the concepts, assessment, and control of exposure to environmental health hazards, the risk of adverse health outcomes resulting from such exposures, and the relationship between the exposures and health outcomes.</p> <p>Further, the course addresses applications and domains of environmental health: water quality, air quality, solid and liquid wastes, occupational health, and safety, as well as climate change/global warming and other global issues in environmental health. The course, also, introduces students to possible future approaches to control the major environmental health problems.</p>
Course Goals:	<p>The course is aimed at providing basic knowledge of environmental health, discovery of the negative impact of environmental factors and providing safeguards for human health. These are placed in the context of the multi-disciplinary scientific field of environmental health as an essential component of the wider field of public health.</p>
Expected Learning Outcomes:	<p>Upon completion of this course, student will be able to:</p> <ul style="list-style-type: none"> • Define the major sources and types of environmental agents. • Discuss the transport and fate of these agents in the environment. • Describe how these agents interact with biological systems, and the mechanisms by which they exert adverse health effects. • Identify and define the steps in the risk-assessment and risk-management processes.

	<ul style="list-style-type: none"> Describe the steps in the regulatory process in terms of risk assessment and risk management and identify current legislation and regulation regarding environmental issues. Identify significant gaps in the current knowledge base concerning the health effects of environmental agents and identify areas of uncertainty in the risk-assessment process. Identify possible future approaches to control the major environmental health problems.
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Student Workload (should be in compliance with student's Learning Outcomes)

Activity	Hours	Day/Week	Total
Lectures	2	15	30
Theoretical/Lab work			
Practical work			
Contacts hours with teacher Consultations during office hours	1	15	15
Field work			
Colloquium, seminars	1	5	5
Homework			
Self-study time (in the library or at home)			
Final exam preparation	2	7	14
Evaluations (tests, quizzes, final exam)	1	5	5
Projects, presentations, etc.	1	6	6
Total			75

Teaching Methods:	The course is comprised of lectures, examples/case study, PBL assignments, classroom interaction-group discussions, project work/seminar/workshops, individual homework, and group presentations. Traditional and self-directed, web-based learning materials are included.
Assessment Methods:	Regular attendance / Class Activity/Interaction: 10% Seminars, topic/activity response presentations: 10% Project/individual assignments: 20% Final Exam: 60% Assignments will be graded based on their content, organization, and quality of writing.

Primary Literature:	<ul style="list-style-type: none"> Robert H. Friis. Essentials of environmental health. Third edition. Burlington, MA: Jones & Bartlett Learning. (2019) Howard Frumkin, Editor. Environmental Health: From Global to Local. Third Edition. John Wiley &
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	<p>Sons. (2016).</p> <ul style="list-style-type: none"> • Frank R. Spellman, Melissa L. Stoudt. The handbook of Environmental Health. The Scarecrow Press, Inc. (2013) • Pollozhani A., Kendrovski V., Kocubovski M., Hoxha-Krasniqi S. Ekologjia humane me higjienë. Shkup, (2012)
Additional Literature:	<ul style="list-style-type: none"> • Health Reference Series. Environmental Health Sourcebook Fifth Edition. Detroit, MI: Omnigraphics, (2018) • Richard Crume (Ed.) Environmental Health in the 21st Century. From Air Pollution to Zoonotic Diseases. Santa Barbara, California : Greenwood. (2018) • Jerome Nriagu. (Ed. In Chief). Encyclopedia of Environmental Health. Second Edition. Elsevier. (2020)

Designed teaching plan

Week	Topic/Title of the lecture
Week 1:	Introduction: The Environment At Risk. Human impact on the environment. Environment-human interaction. Environmental impact on humans. Health and the environment. Environmental factors.
Week 2:	Environmental Epidemiology
Week 3:	Environmental Toxicology. Exposure, dose, response.
Week 4:	Environmental Policy and Regulation. Environmental Hazards and Health Risks. Risk Assessment and Policy Development. Risk communication.
Week 5:	Zoonotic and Vector-Borne Diseases
Week 6:	Toxic Metals and Elements
Week 7:	Pesticides and Other Organic Chemicals
Week 8:	Ionizing and Nonionizing Radiation
Week 9:	Water Quality
Week 10:	Air Quality. Indoor and outdoor air pollution. Air pollution monitoring&control.
Week 11:	Solid and Liquid Wastes. Municipal, industrial, and hazardous waste. Hazardous Waste Management
Week 12:	Health Impacts of Noise Pollution
Week 13:	Occupational Health & Safety
Week 14:	Global Issues in Environmental Health. Climate Change/Global Warming
Week 15:	<i>One Health</i> Concept

Academic Policies and Code of Conduct

Mobile/smartphones and other electronic devices (e.g. iPods) must be turned off (or on vibrate) and hidden from view during class time.
Laptop and tablet computers are allowed for quiet use only; other activities such as checking personal e-mail or browsing the Internet are prohibited.