Course Unit Descriptor

Study Programme: Environmental Engineering
Course Unit Title: Monitoring of the Environment
Course Unit Code: Z204A
Name of Lecturer(s): Vujić Goran
Type and Level of Studies: Bachelor level
Course Status (compulsory/elective): compulsory
Semester (winter/summer): summer
Language of instruction: English
Mode of course unit delivery (face-to-face/distance learning): face-to-face
Number of ECTS Allocated: 6
Prerequisites: None
Course Aims: Acquiring knowledge about the basic principles of the living environment monitoring system functioning, and physical-chemical processes in different media of the living environment in order to precisely determine representative pollutants.
Learning Outcomes: Acquired knowledge enables students to understand the state of the living environment and to understand results obtained in the monitoring systems in order to determine the cause of pollution.
Syllabus: Regulations in the field of air, water, wastewater and other parts of the environmental monitoring. Characteristics of the pollutants in the air, water… Monitoring of emissions of industrial pollutants, monitoring of standard pollutants (SO2, Nox, CO2, CO), suspended particles, carbon black, monitoring of metal emissions, monitoring of specific pollutants. Monitoring of industrial pollutants in the emission (ambient air), monitoring by standard methods of pollutants (SO2, Nox, CO2, CO), suspended particles, carbon black, monitoring of metal emissions. Monitoring of specific pollutants in the emission, Characteristics of air monitoring using continuous automatic stations, monitoring air in the room. Bioindicators for examining the state of human health and ecosystem vulnerability, Biological indicators in the program of the living environment monitoring. Qualitative data analysis in the biomonitoring of non-ionizing and ionizing radiation.
Required Reading: Relevant literature in English, tbd

Weekly Contact Hours: 6	**Lectures: 3**	**Practical work: 3**

Teaching Methods: Lectures, Practice, Consultations. The written part of the examination can be taken through two colloquiums: Colloquium I: Regulations, Characteristics of pollutants, Monitoring of emissions of industrial pollutants, Monitoring of standard pollutants II: Monitoring of specific pollutants in the emission. Characteristics of air monitoring using continuous automatic stations and monitoring air in the room, vulnerability of ecosystem, bioindicators for examining the state of the human health and ecosystem vulnerability, Biological indicators in the program of the living environment monitoring. Qualitative data analysis in biomonitoring on non-ionizing and ionizing radiation. The final part of the examination is oral. Passed colloquiums or the written part of the examination are eliminatory on the examination. The course grade is formed based on the success at the colloquium, term paper (paper and defense) that is, the written and oral part of the examination.
Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Group Assignment		Examination Assignment	
Exercises			
Test			
Test			
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			