Course Unit Descriptor

Study Programme: Environmental Engineering And Occupational Safety Engineering
Course Unit Title: Physical and chemical parameters of the working environment
Course Unit Code: ZR222
Name of Lecturer(s): Mihajlović Ivana, Petrović Maja
Type and Level of Studies: bachelor
Course Status (compulsory/elective): compulsory
Semester (winter/ summer): winter
Language of instruction: english
Mode of course unit delivery (face-to-face/distance learning): face-to-face
Number of ECTS Allocated: 4
Prerequisites: none
Course Aims:. Acquiring knowledge in the field of identification of chemical and physical parameters of the working environment. Introducing students with methodologies for sampling and measuring of working environment parameters. Introduction to the methods of preparation and analysis of the parameters of the working environment.
Learning Outcomes: After completing the course and pass the exam, students will be able to: - Identify significant physical and chemical parameters of specific working environments; - independently select methodologies for sampling and recording of working environment parameters; - recognize the appropriate method of preparation and analysis of the parameters of the working environment.
Syllabus. Physical and chemical parameters of the working environment (temperature, humidity, pressure, noise, vibrations, lighting, number of sub-divided particles in the workplace, chemical damage). Sources of physical harm in the working environment. Sources of chemical pollution in the working environment. Diagnostics of the state of the working environment. Ambient conditions: microclimate parameters (pressure, temperature, humidity). Methods of sampling and recording of physical and chemical parameters of the working environment. Instrumental methods for analyzing the physical and chemical parameters of the working environment.
Required Reading: Relevant literature in English, tbd

Weekly Contact Hours: 2	**Lectures: 2**	**Practical work: 0**

Teaching Methods:
Lectures and laboratory exercises. Consultations. In order to collect pre-examination points during the semester, students are obliged to attend lectures and laboratory exercises and to pass two tests. After successfully completing the pre-examination obligations, students are entitled to take the exam. The exam consists of the written and mandatory oral part. During the semester students can pass the written part of the exam through two colloquiums. Colloquiums, as one of the forms of knowledge test, consist of theoretical and computational work and are written. If the student does not pass the written part of the exam through the form of a colloquium, the student enters the written part of the exam which covers the materials of the entire semester. The overall assessment of the exam is formed by summing up the number of points obtained from pre-examination obligations, colloquia, ie the written part of the exam and the number of points scored in the oral part of the exam.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Attendance			
Computer exercises			
Tests (4x)			