Study program: Environmental Protection

Course title: Measuring and Control of Working Environment Parameters

Professor/assistant: Anica Milošević

Type of course: elective

ECTS credits: 6

Pre-requisites: -

Aims of the course:
Prepare students to: adopt concepts such as working environment parameters, learn the concentration monitoring and examine the impacts of various pollutant factors in the working environment on human health, learn to propose preventive measures in all segments of the work process, properly use and monitor legislation in the field of working environment.

Learning outcomes:
Student will be able to: apply different methods and techniques of measurement and monitoring of working environment parameters, use instruments for measuring the parameters of the working environment, read and process the measurement results, set values according to valid legislation for all working environment parameters, for different jobs, propose measures to improve the working environment.

Syllabus

Theoretical part

Defining working environment parameters. Basic concepts and definitions. Experiment planning. Thermal conform (temperature, pressure and relative humidity). Testing the brightness of the working environment. Lighting testing instruments and measurement methodology. Daily and electrical exposure. Noise testing in the working environment. Measuring instruments and methodology of measurement. Calibration of the measuring chain. Octal noise analysis. Measurement conditions for noise. Determination of the concentration of electrostatic charge in the working environment. Measuring instruments and methodology of measurement. Practical examples and processing of measurement results. Analysis of results and proposal of measures for improving occupational health and safety. Legislation and standards of working environment parameters.

Practical part

Practice, Other forms of teaching, Study research work.

Literature

1. A. Boričić, D. Blagojević, B. Milutinović, N. Bogdanović, Measurement of Working Environment Parameters (in Serbian), 2012, College of Applied Technical Sciences Niš
2. Rulebook on the procedure of inspection and testing of working equipment work and testing of working conditions (in Serbian) ("Official Gazette of RS", No. 94/06),
3. Rulebook on preventive measures for safety and healthy work in workplace (in Serbian) ("Official Gazette of RS", No. 21/09),

Number of active classes			Other forms of teaching:
Lectures: 2	Practical classes: 2	Research work:	

Teaching methods
Classes are held in the form of interactive lectures, auditory, laboratory and computer exercises. Lectures present the theoretical part of the curriculum followed by characteristic examples to facilitate understanding of the content. In laboratory classes they practically apply their knowledge on the available laboratory equipment.

Grading system (maximum 100 points), **grading scale** from 5 to 10: below 51 points grade 5, grade 6 from 51-60 points, grade 7 from 61-70 points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91-100 points.

Pre-exam obligations	**points**	**Final exam**	**points**
activity during theoretical lectures	**10**	written exam	**30**
practical training	**20**	oral exam	**-**
colloquium(s)/seminar papers	**40**		
Sum	**70**	**Sum**	**30**