

Study program: Environmental Protection			
Course title: Measuring and Control of Environment			
Professor/assistant: Aleksandra Boričić			
Type of course: compulsory			
ECTS credits: 5			
Pre-requisites: -			
Aims of the course: Prepare students to: introduce methods and techniques for measuring certain characteristic parameters from the point of view of environmental pollution and methods of processing, presentation and interpretation of these results using statistical methods, learn the theory of an engineering experiment, adopt concepts such as environmental parameters, learn about concentration monitoring and examine the impact of various environmental pollution factors on human health, learn to propose preventive measures in all segments of the environment, properly use and monitor all policies and standards in this field.			
Learning outcomes: Student will be able to: apply different methods and techniques of measurement and monitoring of individual environmental parameters, use instruments for measuring environmental parameters, understand and process the measurement results, set values according to valid legislation for all environmental parameters, propose measures to improve and preserve the environment, monitor environmental parameters.			
Syllabus			
<u>Theoretical part</u> Defining environmental parameters. Basic concepts and definitions. Experiment planning. Basics of metrology. Measuring instruments and methodology of measurement. Measurement errors analysis of results. Practical examples and processing of measurement results. Legislation and required standards of environmental parameters. Measurement of environmental parameters and processing of results of measurements. Manipulation, transfer and recording of measured values. Monitoring. Assessment of the state of the environment by applying statistical tests.			
<u>Practical part</u> Practice, Other forms of teaching, Study research work.			
Literature			
<ol style="list-style-type: none"> 1. Š. Đarmati, Pollution and air pollution (in Serbian), Belgrade Polytechnic, 2007. 2. D. Zivkovic, Pollution and protection of water (in Serbian), Belgrade Polytechnic, 2009. 3. O. Jovanovic, Pollution and protection of the land (in Serbian), Belgrade Polytechnic, 2012 4. O. Jovanović, Monitoring of environmental pollution (in Serbian), Belgrade, 2001. 5. Hodolič J., Stević M., Budak I., Vukelić Đ., Measurement and control of pollution, script (in Serbian), 2007. Faculty of Technical Sciences, Novi Sad. 			
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 auditory exercises students do tasks and deepen the exposed material. In laboratory exercises 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