

Study program: Waste management			
Course title: Processing and data analysis			
Professor/assistant: PhD Milica Cvetković			
Type of course: compulsory			
ECTS credits:6			
Pre-requisites: -			
Aims of the course: is to prepare student to: -learn and apply statistical methods to problems in environmental safety field; -apply quantitative approach to problems in waste management field; -learn different methods of data analysis, including the program package <i>Statistica</i> ; -independently inputs, processes, analyzes and interprets data collected by different quantitative methods of research.			
Learning outcomes: Student is able to: - recognize and apply statistical methods to problems in the field of environmental safety; - know how to collect, edit, spreadsheet and graphics display the data; - analyze data by appropriate quantitative methods; - identify the appropriate sample size and analyze the sampled data; - apply software package statistica for data processing; - apply acquired knowledge in solving specific problems in the field of waste management, using it for personal and professional development and for the contribution of future progress in this field.			
Syllabus			
<u>Theoretical part</u> The role of statistical data processing in the field of environmental protection. Program support for statistical analysis. Sampling and confidence intervals. Testing the hypothesis. Correlation and regression.			
<u>Practical part</u> Methods of data collection. Arranging and processing data. Statistical spreadsheets. Graphical presentation of statistical data. Descriptive, relational and time data analysis (trends). Measures of central tendency. Measures of dispersion. Measures of shapes of dataset. Application of statistical software for statistical data processing. Sampling theory. T-test. Variance analysis. The correlation coefficient. Hi-square test. Application of data processing in the waste management field.			
Literature			
1. M. Šekarić, <i>Statističke metode sa zbirkom zadataka</i> , Univerzitet Singidunum, 2010. 2. M. Merkle, <i>Verovatnoća i statistika za inženjere i studente tehnike</i> , Akademska misao- Beograd, 20 3. S. Gilezan i dr., <i>Zbirka rešenih zadataka iz verovatnoće i statistike</i> , FTN - Novi Sad, 2014.			
Number of active classes			Other forms of teaching:
Lectures:	Practical classes:	Research work:	
Teaching methods			
Grading system (maximum 100 points), grading scale from 5 to 10: below 51 points grade 5, grade 6 from 51-60 points, grade7 from 61-70 points, grade8 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	5	written exam	30
practical training	5	oral exam	
colloquium(s)/seminar papers	40+20		
Sum	30	Sum	30