Course Unit Descriptor

Study Programme: Environmental Engineering			
Course Unit Title: Environmental Engineering			
Course Unit Code: OAS013			
Name of Lecturer(s): Associate Professor Bogdana Vujic, PhD			
Type and Level of Studies: Bachelor Academic Degree			
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: The main aim of the course is to acquire the basic knowledge in environmental engineering, general environmental problems on micro and macro level and solving the general and specific resource problems. Identification the optimal technology from the standpoint of economy, society and the other relevant impact factors. To train listeners to initiate and implement ISO standards in the organization, initiate and solve important environmental problems.			
Learning Outcomes: Ability to act, analyze and generalize in the decision-making process on relation economy-society-technique-environmental protection.			
Syllabus: Introduction to Environmental Engineering. Sustainable development. Technical-technological development and environmental engineering. Population and use of available resources. Basic physical-chemical principles in environmental engineering. Environmental incidents and classification. Possibility of incidence. Air protection. Water protection. Solid waste. Noise as pollutant. Electromagnetic waves as a source of pollution. Ecological management. ISO- 14000. Environment and Ethics. Practical classes: Practical Exercises - Basic Physical Chemical principles in Environmental Engineering. Air protection. Climate change. Water as a resource. Wastewater. Economic analysis of water protection. Solid waste. Noise contamination. ISO-14000. Computer exercises that accompany theoretical lessons. Visit a work organization with a developed installed environmental protection system. Instructions and consultative work in realization of seminars.			
Required Reading: 1. J. Jeffery Peirce, Ruth F. Weiner, P. Aarne Vesilind, Environmental Pollution and Control, Butterworth-Heinemann, 1990.			
Weekly Contact Hours: 5	**Lectures: 3**	**Practical work: 2**	
Teaching Methods: Lectures and students group work			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	**Final exam**	points

Active class participation	5	referat	60
Active practice participation	15	oral exam	10
Seminar(s)	10		