

Study Programme: Bachelor Academic Studies in Environmental Protection – Environmental Protection Analyst			
Course Unit Title: Organic Chemistry I			
Course Unit Code: OZZS-601-I			
Name of Lecturer(s): Assistant professor Ksenija Pavlović			
Type and Level of Studies: Bachelor of Science Degree			
Course Status (compulsory/elective): Compulsory			
Semester (winter/summer): Summer			
Language of instruction: English			
Mode of course unit delivery (face-to-face/distance learning): Face-to-face			
Number of ECTS Allocated: 5			
Prerequisites: none			
Course Aims: Master basic theoretical and practical knowledge about the structure, preparation and physico-chemical properties of organic compounds. Introduction with IUPAC nomenclature this principal classes of organic compounds.			
Learning Outcomes: Mastered the basic knowledge on the classification of organic compounds. Overcome by IUPAC nomenclature, structure and characteristics of the major classes of organic compounds, with particular emphasis on the organic molecule for the important aspect of the control and protection of the environment.			
Syllabus:			
<i>Theory</i>			
Getting to know the properties of the carbon atoms and the way of presenting molecule in organic chemistry. Getting to know the structure and nomenclature of the principal classes of organic compounds: alkanes, alkyl halides, alcohols, alkenes, alkynes and polymers, aromatic compounds, aldehydes and ketones, amines, heterocyclic, carboxylic acids and their functional derivatives, carbohydrates, amino acids. Preparation and physical properties of the above mentioned classes of organic compounds. The study of basic organic compounds essential for the protection of the environment.			
<i>Practice</i>			
Introduction to laboratory dishes and basic operations in organic laboratories. Testing the physical properties of organic compounds and preparation of certain organic molecules.			
Required Reading:			
1. K.P.C. Vollhardt, N.E. Schore: Organic chemistry: Structure and Function, 5 th Edition, W.H. Freeman and Comp., 2007.			
2. J. McMurry: Fundamentals of Organic Chemistry, 7 th Edition, Brooks/Cole Publishing Comp. 2010.			
Weekly Contact Hours: 4	Lectures: 2	Practical work: 2	
Teaching Methods: Lectures, laboratory work			
Knowledge Assessment (maximum of 100 points): 100			
Pre-exam obligations	points	Final exam	points
Active class participation	5	Written exam	60
Practical work	15		
Preliminary exam(s)	20	Oral exam	/