



Course ID: HOB1125	Course name: ANALYTICS OF ORGANIC POLLUTANTS		
Cycle: SECONDE	Year: FIRST	Semester: I	ECTS credits: 4
Course status: ELECTIVE	Total course hours: 60 Lectures: 30 Laboratory: 30		
Teaching participants:	Teachers and associates with expertise in the field to which the subject belongs		
Prerequisite for enrollment:	NO		
Course aims:	Introducing students with the most significant organic pollutants in water, air and soil.		
Thematic course units:	<ol style="list-style-type: none">1. Organic pollutants, generally: polutanata. Types of organic pollution.2. Some organic pollutants: POPs (persistent organic pollutants, contaminants).3. Structure, resources, features, stability, solubility, toxicity, resistance to degradation, volatility, bioaccumulation of POPs substances.4. Pesticides (chlordane, DDT, aldrin, hexachlorobenzene, polychlorinated benzo-p-dioxins, polychlorinated benzo-p-furans, industrial chemicals, inadvertently created products, polychlorinated biphenyls (PCBs))5. Polycyclic aromatic hydrocarbons (PAHs)6. Mineral oils, total fats and oils7. Phenols8. Soaps and detergents9. Petroleum and its products10. Some selected organic pollutants		
Learning outcomes:	Knowledge: Student acquires knowledge about the type, structure, properties, stability of organic pollutants, as well as about sophisticated methods for their analysis. Skills: The student develops critical thinking and skills needed for qualitative and quantitative analysis of organic pollutants, both through the theoretical basis and through practical work. Competences: The student is able to independently perform the analysis of organic pollutants.		
Teaching methodology:	Classroom lectures and laboratory exercises		

Assessment methods and grading system¹:	Grading criteria		
	Criteria	Maximal score	Required score
	1. Class attendance	5	3
	2. Class activities	10	5
	3. Midterms	45	25
	4. Final exam	40	22
	Total	100	55
	Scores and grading		
	Score	Grade (B&H)	Grade (ECTS)
	< 55	5	F, FX
	55–64	6	E
	65–74	7	D
	75–84	8	C
85–94	9	B	
95–100	10	A	
Literature²:	<p>Mandatory literature:</p> <ol style="list-style-type: none"> 1. Manahan, S. E. (2004) Fundamentals of Environmental Chemistry, 8th Ed, CRC 2. Popek, E. (2017) Sampling and Analysis of Environmental Chemical Pollutants, 2nd Ed. Elsevier 3. Landis, W. G., Yu, M. H. (2003) Introduction to Environmental Toxicology: Impacts of chemicals Upon Ecological Systems, 3rd Ed. CRC. <p>Supplementary literature:</p> <ol style="list-style-type: none"> 1. Tölgýessy, J. (1993) Chemistry and biology of water; air and soil, Environmental Aspects, Elsevier. 		

¹ The grading structure for each subject is determined by the Council of the organizational unit before the beginning of the academic year in which the subject is taught as per Article 64, paragraph 6 of the Law on Higher Education of Sarajevo Canton

² The Senate of the higher education institution, as an institution, or the Council of the organizational unit of the higher education institution, as a public institution, determines by a special decision, which is published on its website before the beginning of the academic year obligatory, mandatory and recommended textbooks and manuals, as well as other recommended literature based on which exams are prepared and taken as per Article 56, paragraph 3 of the Law on Higher Education of the Sarajevo Canton