



Course ID: HOB481	Course name: CHEMISTRY OF ORGANIC POLLUTANTS		
Cycle: FIRST	Year: FOURTH	Semester: VIII	ECTS credits:3
Course status: MANDATORY		Total course hours: 45 Lectures: 30 Laboratory: 15	
Teaching participants:	Teachers and associates with expertise in the field to which the subject belongs		
Prerequisite for enrollment:	-		
Course aims:	Introducing students with the most significant organic pollutants of water, air and soil. Methods for determinations of organic pollutants.		
Thematic course units:	<ol style="list-style-type: none">1. Organic pollutants: organic polutanata. Types of pollution,2. Structure, resources, properties, stability, solubility, toxicity, resistance to degradation, volatility, some bioaccumulation of pollutants:3. POPs (persistent organic pollutants, pollutants).4. Pesticides5. Industrial chemicals6. Polychlorinated biphenyls (PCBs)7. Polycyclic aromatic hydrocarbons, (PAHs),8. Mineral oil, total fats and oils9. Phenols and phthalates10. Soaps and detergents11. Petroleum and its products12. Some selected organic pollutants13. Methods for determination of organic pollutants		
Learning outcomes:	Knowledge: Acquisition of basic knowledge about organic pollutants, characteristics of such compounds, impact on health and the environment, as a way of identifying them Skills: Through this course, the student will learn about the type and fate of some of the most important organic pollutants in the environment. Competences: Instruct students on the importance of organic pollutants in human health, their identification and ways to remove them.		

Teaching methodology:	Auditory lectures, 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 (BiH)	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 Press. 2. Landis, W. G., Yu, M.H. (2004) Introduction to Environmental Toxicology: Impacts of Chemicals Upon Ecological Systems, 3rd ed., CRC Press. 3. Crowl, D. A., Louvar, J. F. (2011) Chemical Process Safety: Fundamentals with Applications, 3rd ed., Prentice Hall. <p>Supplementary literature:</p> <ol style="list-style-type: none"> 1. Tölgyessy, J. (1993) Chemistry and Biology of Water; Air and Soil: Environmental Aspects, Elsevier. 2. Criddle, W. J., Ellis, G. P. (1990) Spectral & Chemical Characterisation of Organic Compounds: a Laboratory Handbook, 3rd ed., John Wiley & Sons, New York. 3. Ahuja, S. (2003) Chromatography and Separation Science (SST) (Separation Science and Technology), Academic Press 		

¹The 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

²The 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