



<b>Course ID:</b> HOBII3	<b>Course name: METHODS OF SEPARATION AND IDENTIFICATION OF ORGANIC POLLUTANTS</b>		
<b>Cycle:</b> SECOND	<b>Year:</b> FIRST	<b>Semester: I</b>	<b>ECTS credits:5</b>
<b>Course status:</b> ELECTIVE		<b>Total course hours: 75</b> Lectures: 45 Laboratory: 30	
<b>Teaching participants:</b>	<b>Teachers and associates with expertise in the field to which the subject belongs</b>		
<b>Prerequisite for enrollment:</b>	-		
<b>Course aims:</b>	The student will be introduced to the methods of separation and identification used for the identification and quantification of organic pollutants.		
<b>Thematic course units:</b>	<ol style="list-style-type: none"><li>1. Introduction - an overview of the methods used in the analysis of selected organic pollutants.</li><li>2. Separation methods (Extraction, centrifugation, electrophoresis, chromatography, related techniques).</li><li>3. Identification methods (UV-Vis spectrophotometry, fluorescence spectroscopy, infrared spectrometry, nuclear magnetic resonance spectrometry, mass spectrometry).</li><li>4. Selection of appropriate separation methods and identification methods for selected organic pollutants (basic criteria).</li></ol>		
<b>Learning outcomes:</b>	Knowledge: The student is familiar with identification separation techniques that can be applied in the analysis of organic pollutants present in environmental samples or food products. 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.		
<b>Teaching methodology:</b>	Auditory lectures, laboratory exercises		

<b>Assessment methods and grading system<sup>1</sup>:</b>	<b>Grading criteria</b>		
	Criteria	Maximal score	Required score
	1. Class attendance	5	3
	2. Class activities	20	10
	3. Midterms	35	20
	4. Final exam	40	22
	Total	100	55
	<b>Scores and grading</b>		
	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	
<b>Literature<sup>2</sup>:</b>	<p>Mandatory literature:</p> <ol style="list-style-type: none"> <li>Ahuja S., (2002) Chromatography and Separation Science (SST) (Separation Science and Technology), Academic Press</li> <li>Encyclopaedia on Separation Science, Academic Press, 2000.</li> <li>Rouessac, F., Rouessac, A., (2000) Chemical Analysis: Modern Instrumentation Methods and Techniques, John Wiley &amp; Sons</li> </ol> <p>Supplementary literature:</p> <ol style="list-style-type: none"> <li>Manahan, S. E., (2004) Fundamentals of Environmental Chemistry, 8th Ed, CRC</li> <li>Recent scientific papers</li> </ol>		

<sup>1</sup>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

<sup>2</sup>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