



Course ID: HBOI01	Course name: IMMUNOCHEMISTRY		
Cycle: SECOND	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 [do not enter names in this section. Leave the wording as indicated in this section]		
Prerequisite for enrollment:	None.		
Course aims:	The aim is to introduce students to the chemistry of immune reactions of the organism.		
Thematic course units:	<ol style="list-style-type: none">1. Introduction to immunochemistry and immunology2. Antigen-antibody reaction mechanisms3. Cellular immunity4. Immunochemistry and immunochemical reactions5. Immunoglobulins, pathobiochemistry, diagnostics6. Colloidal reactions, nephelometry7. Protein electrophoresis8. Immunoelectrophoresis9. Radial immuno-gel diffusion10. Multiple myeloma (plasmacytoma)		
Learning outcomes:	<p>Knowledge: Students will interpret/discuss the basics of immunology (types of immunity), explore the aims and importance of immunochemistry (structure and classification of antigens and antibodies, reaction antigen-antibody).</p> <p>Skills: Based on theoretical principles students will be able to make decisions which immunochemical method is applicable or most suitable in certain cases.</p> <p>Competences: Based on the acquired knowledge, students will analyze the mechanisms, the importance and diagnostic use of immunochemical methods.</p>		
Teaching methodology:	Auditory lectures and theoretical 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	55	2 × 11
	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:	Mandatory literature:		
	1. Pier, G.B., Lyczak, J.B., Wetzler, L.M. (2004) Immunology, infection, and immunity. ASM press.		
	2. Ferenčík, M. (2012) Handbook of immunochemistry. Springer Science & Business Media, B.V.		
	3. Dodig, S. (2014) Imunohemija. Medicinska naklada, Zagreb.		
	Supplementary literature:		
1. Mikkelsen, S.R., Cortón, E. (2016) <i>Bioanalytical chemistry</i> . John Wiley & Sons.			

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