

<i>Name of the course</i>	Laboratory diagnostics of inflammation			Code	
<i>Type of study program Cycle</i>	Integrated studies – Medicine			Year of study	2
<i>Credits (ECTS) :</i>	1,5	<i>Semester</i>	IV	Number of hours per semester (l+e+s)	(30) 12+10+8
<i>Status of the course:</i>	elective	<i>Preconditions:</i>		<i>Comparative conditions:</i>	
<i>Access to course:</i>	2 nd year students			<i>Hours of instructions:</i>	According to schedule
<i>Course teacher:</i>	Assistant professor Ivanka Mikulić				
<i>Consultations:</i>					
<i>E-mail address and phone number:</i>					
<i>Associate teachers</i>	Vinka Mikulić, mag.chem.; Kristina Landeka, mag. chem.				
<i>Consultations:</i>					
<i>E-mail address and phone number:</i>					
<i>The aims of the course:</i>	The main goal of the course is to upgrade students' knowledge about the mechanisms of inflammation development, and laboratory indicators of inflammation during lectures, seminars and exercises. Applying knowledge on problem-oriented seminars and exercises, on which students will elaborate the basics of different methods for the laboratory markers of inflammation.				
<i>Learning outcomes (general and specific competences):</i>	<p>General outcomes: Applying the independent learning through the study in the way of critical and self-critical questioning of scientific truth. Remembering the possession of personal qualities (team work and personal contribution, interest, active listening, and building positive relationships with members of the group).</p> <p>Specific outcomes: Understanding the specific laboratory methods and indicators of inflammation. Remembering the mechanisms of occurrence and possible outcomes of inflammation, and ultimately, the differential diagnosis of infections, sepsis, and inflammatory autoimmune disease with the help of laboratory indicators of inflammation.</p>				
<i>Course content (Syllabus):</i>	The elective course consists of lectures, followed by seminars and exercises during which students can upgrade knowledge in chemistry. Also, students have an opportunity to present a seminar topic.				
<i>Format of instruction (mark in bold)</i>	Lectures	Exercises	Seminars	Independent assignments	

	Consultations	Work with mentor	Field work	Other
	Remarks:			
Student responsibilities	Students are required to attend classes and to present seminar tasks.			
Screening student work (mark in bold)	Class attendance	Class participations	Seminar essay	Practical training
	Oral exam	Written exam	Continuous assessment	Essay
Detailed evaluation within a European system of points (Example)				
STUDENTS RESPONSIBILITIES	HOURS	PROPORTIONS OF ECTS CREDITS	PROPORTION S OF MARK	
Class attendance and participations	30	1		
Seminar essay		1	20%	
Written exam	50	2	60%	
Oral exam	30	1	20%	
Further clarification:				
According to the regulations of the study, final grade is obtained: A = 91-100% 5 B = 79 to 90% 4 C = 67 to 78% 3 D = 55 to 66% 2 F = 0 to 54% 1				
Required literature:	Notes from the lectures (synopsis) Selected research papers related to the seminar topics			
Optional literature:	Čvorišćec D, Čepelak I. Štrausova medicinska biokemija. Medicinska naklada, Zagreb, 2009. Thomas L. Clinical Laboratory Diagnostics. 1th ed. TH-books Verlagsgesellschaft mbH, Frankfurt/Main, Germany, 1998.			
Additional information about the course	Monitoring methods of teaching quality: - student questionnaire - analysis the quality by students and teachers - exam results analysis - report of the office for teaching quality - external evaluation (visit of team for quality control)			

Annexes: calendar classes

<i>The number of teaching units</i>	TOPICS AND LITERATURE
I.	Title: Definition, general characteristics, possible outcomes of inflammation. Sepsis, acute inflammation, chronic inflammation. Acute phase proteins and acute phase serum protein electrophoresis, Erc sedimentation
	Short description:
	Literature: required and optional
II.	Title: Laboratory markers of inflammation: Lkc number, CRP, SAA, Neopterin, Procalcitonin. High-sensitivity (hs) CRP, a role in diagnostics.
	Short description:
	Literature: required and optional
III.	Title: Interleukins: IL 6, IL8, TNF
	Short description:
	Literature: required and optional