	UNIVERSITY OF BANJA LUKA FACULTY OF MEDICINE				
	UNDERGRADUATE STUDIES				
	Study Programme of:	**MEDICINE**			
Course Unit Name	**Clinical biochemistry**				
Type of Course Unit	**Applied Professional**				
Course Unit Code	**Course Unit Status**	**Semester**	**Class Workload**	**Number of ECTS Credits**	
TO BE DESIGNATED	COMPULSORY	IX	1L + 1P	2	
Staff	Prof. Nela Raseta Simovic, PhD, Full Professor; Prof. dr Žana Radić Savić, MD, PhD, Assistant Professor; Mirna Popovic Saric, BSc, Expert Associate				

Eligibility Requirements	**Form of Requirements**
All course units from the previous academic year having been passed	In accordance with the Rules of Studying at I Cycle Academic Studies

Goals of the Course Unit:

The course unit aims at 1. introducing the students to biochemical analyses used in contemporary laboratory diagnostics and enabling them to properly interpret the results of biochemical tests in accordance with human pathology and at 2. enabling them to recognise and identify certain laboratory findings by taking into consideration a patient's medical history and clinical chart.

Learning Outcomes (acquired knowledge):

The students will have been able to search for respective laboratory tests in accordance with a patient's medical history and clinical chart, to properly interpret the results gained, and to rationally choose diagnostic procedures.

Contents of the Course Unit:

Strategy of rational use of laboratory findings. Role and place of laboratory testing and dependence of clinical decision upon laboratory tests. Interpretation of hematology aboratory findings. Biochemical analyses of blood proteins and their diagnostic significance. Biochemical parameters of inflammation. Laboratory diagnostics of lipoprotein disorders and assessment of cardiovascular risk. Biochemical diagnostics of myocardial ischemia and necrosis. Laboratory diagnostics of diabetes mellitus. Biochemical parameters used for testing the function of liver, kidneys, exocrine pancreas, and endocrine system. Tumor markers and biomarkers of bone metabolism disorders. Laboratory diagnostics of neurological diseases and urgent medical conditions. Clinical biochemistry in paediatrics and geriatrics. Laboratory monitoring of pregnancy. Impact of drugs on the results of the most common biochemical findings.

Teaching Methods:

The classes are given in the form of lectures and practical classes, with continuous revision through practicals, seminars, midterms, office hours, and independent students' work.

Literature:

"Thaler, Jonathan E., i Malcolm S. Thaler. *The only diagnostic book you'll eved need.* Data Status, 2025"

Examination Forms:				
Pre-Exam Duties		**Final Exam**	**Total Points**	
Midterms	**40**	**Final exam (Test)**	**60**	**100**

Note for the Course Unit:

Syllabus designer: Prof. Nela Raseta Simovic, PhD, Full Professor, Prof. dr Žana Radić Savić, MD, PhD, Assistant Professor