

Level: bachelor				
Course title: Medical Biochemistry (IB-409)				
Status: obligatory				
ECTS: 7				
Requirements: none				
Learning objectives Provide students with broad and balanced knowledge of key concepts biochemical diagnostics. Develop practical skills necessary for self-understanding and solving problems and issues in the field of biochemical diagnostics using a standard methodology.				
Learning outcomes After successful completion of this course, the student is able to: 1. Explain the concepts related to work in clinical (medical) laboratory biochemical 2. Define the metabolic role of certain tissues and metabolites in physiological and / or pathological processes 3. Explain the metabolism of carbohydrates, proteins, lipids and lipoproteins 4. Correlate metabolic processes and methods for monitoring metabolites concentration 5. Apply standard experimental methods used in clinical (medical) laboratory biochemical				
Syllabus <i>Theoretical instruction</i> Work in clinical (medical) biochemical laboratory: organization, sampling and safeguards. Metabolism of carbohydrates, proteins and amino acids, lipids and lipoproteins. Reference values of metabolites, methods for their determination and importance in the process of homeostasis, markers of organ function and tissue. Clinical biochemistry in paediatrics and geriatrics. Molecular biology methods in clinical biochemistry, chemical toxicology. Biochemical effects of the tumour.				
Weekly teaching load				Other:
Lectures: 3	Exercises: 3	Other forms of teaching:	Student research:	