

SYLLABUS

Subject:	PATHOBIOCHEMISTRY - selected chapters		
Field of study:	<i>General Medicine</i>	Degree of study:	<i>III.</i>
Study programme:	<i>Clinical Biochemistry</i>	Form of study:	<i>Internal / External</i>
Subject evaluation:	<i>Exam</i>	Subject type:	<i>Compulsory optional</i>

Department: **Department of Medical and Clinical Biochemistry UPJŠ FM**

<i>Lectures and seminars</i>
<p>DISORDERS OF CARBOHYDRATES METABOLISM</p> <ul style="list-style-type: none"> - Maintenance of fasting and postprandial blood glucose - Diabetes mellitus, hypoglycemia - Laboratory parameters for the diagnosis and monitoring of diabetes - Glycogen storage diseases
<p>DISORDERS OF LIPID METABOLISM</p> <ul style="list-style-type: none"> - Lipoproteins and their metabolism - The role of lipoproteins in atherogenesis - The most common primary and secondary dyslipidemias - Lipids in assessment of cardiovascular risk
<p>DISORDERS OF AMINO ACIDS AND PLASMA PROTEINS</p> <ul style="list-style-type: none"> - Disorders of amino acid metabolism - Protein species as diagnostic markers - Blood, plasma proteins, dysproteinemias
<p>ACID - BASE BALANCE DISORDERS</p> <ul style="list-style-type: none"> - Physiology of regulation of acid-base balance - Pathobiochemistry of metabolic acid-base disorders - Pathobiochemistry of respiratory acid-base disorders
<p>WATER AND ELECTROLYTE BALANCE DISORDERS</p> <ul style="list-style-type: none"> - Physiological mechanisms regulating water, sodium and potassium balance - Dehydration, hyperhydration, osmolality - Hyponatremia and hyponatremia - Hypokalemia and hyperkalemia
<p>PATOBIOCHEMISTRY OF KIDNEY FUNCTIONS</p> <ul style="list-style-type: none"> - The position of kidneys in maintaining the constant composition of the internal environment - Urine analysis - Renal failure – pathophysiological and biochemical findings
<p>PATOBIOCHEMISTRY OF THE HEPATOBILIAR SYSTEM</p> <ul style="list-style-type: none"> - Liver and its physiological functions - Liver enzymes - Hyperbilirubinemias and their laboratory diagnosis - Biochemical manifestations of liver failure
<p>DISORDERS OF IRON AND PORPHYRIN METABOLISM</p> <ul style="list-style-type: none"> - Physiology and regulation of iron balance - Iron deficiency and iron overload - laboratory diagnostics - Disorders of porphyrin and porphyria metabolism