

	Week from	Lectures Tuesday 12:30-13:15 Seminary Room ÚLBLD (No.3.074)	Teacher	Seminars Tuesday 13:30-15:00 Seminary Room ÚLBLD (No.3.074)	Teacher	Practical lessons
1	24. 2.	<i>Anatomical Dissections</i>	Dr. Pláteník	Biologic oxidation, mitochondrial respiratory chain and oxidative phosphorylation. Citric acid cycle.	Dr. Pláteník	
2	3. 3.					
3	10. 3.	General features of metabolism. Bioenergetics.	Dr. Pláteník	Metabolism of saccharides.	Dr. Pláteník	<b>Saccharides III:</b> Estimation of glycemia. Glucose and ketone bodies in urine.
4	17. 3.	Digestion, absorption, storage and transport of saccharides.	Dr. Pláteník	Metabolism of fatty acids and triacylglycerols	Doc. Křepela	
5	24. 3.	Regulation of metabolism of saccharides.	Dr. Pláteník	Metabolism of amino acids: Transamination, deamination, synthesis of urea.	Dr. Pláteník	<b>Lipids:</b> Estimation of total cholesterol and triacylglycerols. Demonstration of double bonds in fatty acids. Test for malondialdehyde.
6	31. 3.	Steroids: Synthesis and metabolism. Steroid hormones. Bile acids.	Dr. Vecka	Relationships between metabolism of lipids and saccharides. Starvation	Dr. Pláteník	<b>Revison test I: Core metabolic pathways</b>
7	7. 4.	Conversion of amino acids to biologically active derivatives.	Dr. Krtíl	Porphyrins, bile pigments, purines, pyrimidines	Doc. Křepela	<b>Friday 18.4. Easter Holiday</b>
8	14. 4.	Lipoproteins: Classification, properties and metabolism.	Dr. Vecka	Transcription and translation.	Dr. Janatová	<b>Liver tests:</b> Direct and indirect bilirubin. Estimation of aminotransferases.
9	21. 4.	Biosynthesis of nucleic acids.	Dr. Soukupová	Metabolism of calcium, phosphate, and other elements and vitamins necessary for mineralisation of bone and teeth.	Doc. Malbohan	
10	28. 4.	The connective tissue, bone and cartilage. Proteoglycans, collagen and elastin – metabolism.	Doc. Malbohan	Methods of molecular biology.	Dr. Šafaříková	<b>Bone and teeth:</b> Estimation of calcium and phosphate in serum and urine. Isoenzymes of alkaline phosphatase. Properties of dental hydroxyapatite.
11	5. 5.	Tooth: Chemical composition and structure	Doc. Malbohan			
12	12. 5.	<b>Rector's day</b>				
13	19. 5.			Essentials of cell signaling and its disorders.	Dr. Pláteník	
14	26. 5.	Consultations		Molecular biology and pathobiochemistry of tumor growth.	Doc. Vachtenheim	<b>Revision test II: Practical lessons</b>
15	2. 6.					<b>Credit</b>