

	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.					
2	3. 3.					
3	10. 3.	General features of metabolism. Bioenergetics.	Dr. Pláteník	Biologic oxidation, mitochondrial respiratory chain and oxidative phosphorylation. Citric acid cycle.	Dr. Pláteník	
4	17. 3.	Digestion, absorption, storage and transport of saccharides.	Dr. Pláteník	Metabolism of saccharides.	Dr. Pláteník	Saccharides III: Estimation of glycemia. Glucose and ketone bodies in urine.
5	24. 3.	Regulation of metabolism of saccharides.	Dr. Pláteník	Metabolism of fatty acids and triacylglycerols	Doc. Křepela	
6	31. 3.	Steroids: Synthesis and metabolism. Steroid hormones. Bile acids.	Dr. Vecka	Metabolism of amino acids: Transamination, deamination, synthesis of urea.	Dr. Pláteník	Lipids: Estimation of total cholesterol and triacylglycerols. Demonstration of double bonds in fatty acids. Test for malondialdehyde.
7	7. 4.	Conversion of amino acids to biologically active derivatives.	Dr. Krtíl	Relationships between metabolism of lipids and saccharides. Starvation	Dr. Pláteník	Revison test I: Core metabolic pathways
8	14. 4.	Lipoproteins: Classification, properties and metabolism.	Dr. Vecka	Porphyrins, bile pigments, purines, pyrimidines	Doc. Křepela	Friday 18.4. Easter Holiday
9	21. 4.	Biosynthesis of nucleic acids.	Dr. Soukupová	Transcription and translation.	Dr. Janatová	Liver tests: Direct and indirect bilirubin. Estimation of aminotransferases.
10	28. 4.	The connective tissue, bone and cartilage. Proteoglycans, collagen and elastin – metabolism.	Doc. Malbohan	Metabolism of calcium, phosphate, and other elements and vitamins necessary for mineralisation of bone and teeth.	Doc. Malbohan	
11	5. 5.	Tooth: Chemical composition and structure	Doc. Malbohan	Methods of molecular biology.	Dr. Šafaříková	Bone and teeth: Estimation of calcium and phosphate in serum and urine. Isoenzymes of alkaline phosphatase. Properties of dental hydroxyapatite.
12	12. 5.	Rector's day				
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	Revision test II: Practical lessons
15	2. 6.					Credit