BIOCHEMISTRY I

VSBC021s, ZLBC021s Spring 2009

SEMIN	NARY CLASSES	2nd Semester 2009
Week	Date	
1	16. 2. – 20. 2.	Introduction into the metabolism of cells (differences between prokatyotic and eukaryotic cell, compartmentation of metabolic processes, enzyme markers of cell fractions, non-covalent interactions in the cell and their significance).
2	23. 2. – 27. 2.	Structure of haemoglobin and its relationship to the function. Hb types in the blood of healthy subjects, HbCO and MetHb, abnormal Hb types.
3	2. – 6. 3.	Enzymes - reaction rate, progress curve, the Michaelis plot and K_m , enzyme inhibition.
4	9. – 13. 3.	Coenzymes, their relationship to vitamins.
5	16. – 20. 3.	Written test I (Biochemical methods, haemoglobin, enzymology, coenzymes.) Membrane structure and assembly. Transport across membranes.
6	6.týden 23. – 27. 3.	Metabolism of glucose: Glycolysis under anaerobic and aerobic conditions and the oxidation of pyruvate. Gluconeogenesis. Glycogenesis and glycogenolysis.
7	30. 3 3. 4.	Metabolism of proteins. Common features of amino acid conversion. The synthesis of urea. Nitrogen balance.
8	6. – 10. 4.	Important reactions in amino acid catabolism.
9	14. – 20. 4.	Written test II (Membranes, transport across membranes, metabolism of saccharides and amino acids.) Biosynthesis and desaturation of fatty acids. The sources of essential fatty acids. Metabolism of triacylglycerols.
10	10.týden 21. – 27. 4.	Metabolism of phospholipids. Biosynthesis of eicosanoids. Peroxidation of lipids.
11	28. 4. – 4. 5.	Written test III (Metabolism of lipids.) The citric acid cycle.
12	5. – 11. 5.	The respiratory chain and oxidative phosphorylation.
13	12 18. 5.	Credit test for the students who did not reach the required result in preceding tests.
14	19. – 25. 5.	Compensatory lessons, consultation. Credits.
15	25. 5. – 29. 5.	(Anatomical dissection course.)

Students are expected to come to the seminary room at least 5 minutes before the start of the lesson. Attendance in seminars is obligatory.

All absences must be justified through the Department of study affairs **up to 5 days**. Illness is usually the only acceptable excuse for absence from class and must be officially confirmed. After being absent the student must make up for the study materials from the given seminar according to the teachers instructions.

Neglected lessons have to be made up by 19. 6. 2009.

Conditions for giving the course-unit credit

The first condition is full (100%) attendance in the all seminars.

Three short tests are written during the semester. Students that will obtain 70% points or more during the semester are not obliged to write the credit test.

The other students will write the credit test with the 30 questions in the last week of the semester. The limit for passing the credit test is 12 points. Students that will not fulfill this limit will be allowed to repeat the test once. Remedial dates for writing the credit test will be scheduled till 19.6.2009. Students that will not fulfill this requirement will not be given the course-unit credit.

Obtaining of course-unit credits of practices and seminars is the pre-requisite for registration to the examination of Biochemistry I.