

## GENERAL MEDICINE, DENTISTRY

## VSBC021s, ZLBC021s

Date	
1. week 18. 2. – 22. 2.	Introduction into the metabolism of cells (differences between prokaryotic and eukaryotic cell, compartmentation of metabolic processes, enzyme markers of cell fractions, non-covalent interactions in the cell and their significance).
2. week 25. 2. – 1. 3.	Structure of haemoglobin and its relationship to the function. Hb types in the blood of healthy subjects, HbCO and MetHb, abnormal Hb types.
3. week 4. 3. – 8. 3.	Enzymes - reaction rate, progress curve, the Michaelis plot and $K_m$ , enzyme inhibition.
4. week 11. 3. – 15. 3.	Coenzymes, their relationship to vitamins.
5. week 18. 3. – 22. 3.	Membrane structure and assembly. Transport across membranes. <b>Written test I – 25 questions</b> (Haemoglobin, enzymology, coenzymes).
6. week 25. 3. – 29. 4.	Metabolism of glucose: Glycolysis under anaerobic and aerobic conditions and the oxidation of pyruvate. Gluconeogenesis. Glycogenesis and glycogenolysis.
	<i>#Beginning the 7th week the weekly program starts on Tuesdays</i>
7. week # 2. 4. – 8. 4.	Metabolism of proteins. Common features of amino acid conversion. The synthesis of urea. Nitrogen balance.
8. week 9. 4. – 15. 4.	Important reactions in amino acid catabolism.
9. week 16. 4. – 22. 4.	Biosynthesis and desaturation of fatty acids. The sources of essential fatty acids. Metabolism of triacylglycerols. <b>Written test II- 25 questions</b> (Membranes, membrane transport, metabolism of saccharides and amino acids.)
10. week 23. 4. – 29. 4.	Peroxidation of lipids. Metabolism of phospholipids. Biosynthesis of eicosanoids.
11. week 30. 4. – 6. 5.	The citric acid cycle. <b>Written test III – 25 questions</b> (Metabolism of lipids.)
12. week 7. 5. – 13. 5.	The respiratory chain and oxidative phosphorylation.
13. week 14.5.-20.5.	Replication, transcription, translation
14. week 21. 5. – 27. 5.	<b>Compensatory lessons.</b> <b>Credit test</b> for the students who did not reach the required limit 52/75.
15. week 27. 5. – 31. 5.	<i>Anatomy dissections</i>

**Conditions for giving the course-unit credit**

- Full (100%) attendance in seminars is the principal condition.
- If any absence, it must be apologized through Department of Study Affairs **up to five days**.
- If apology is recorded in Information System (IS), then student is allowed to make up the absence according to teacher's instructions.
- Three revision tests are written in seminars, semestral limit for credit is 52/75.
- If the semestral limit is not fulfilled, student must write the Credit test (limit 14/30).
- All absences must be made up before writing the credit test.
- One repetition of the Credit test is approved.

**Deadline for any issue** (making up all missing and justified lessons, passing the credit test) **is 14. 6. 2013.**

**Students that will not meet 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.