BIOCHEMISTRY II **ZLBC041c**

LABORATORY CLASSES 4th Semester 2009 **Spring 2009**

	Date	*Experiments*
1	**18 Feb.**	Directions for laboratory work. Handling biological material. 1.1 Blood collection. 1.2 Blood processing. 1.3 Manual methods, pipetting. 1.3 Biochemical analyzers. 1.4 Interpretation of test results. 1.5 Test requisition forms
2	**4 Mar.**	Investigation of lipid and cholesterol metabolism 2.1 Determination of total cholesterol in serum and blood. 2.2 Determination of blood triacylglycerols usány Reflotron . 2.3 Determination of HDL-cholesterol and LDL-cholesterol. 2.4 Calculation of LDL-cholesterol 2.5 Electrophoresis of serum lipoproteins.
3	**18 Mar.**	Investigations of glucose metabolism. Diabetes mellitus 3.1 Enzymatic determination of serum glucose. 3.2 Determination of glycaemia by personál glucometer. 3.3 Oral glucose tolerance test (oGTT). 3.4 Detection and determination of glucose in urine. 3.5 Detection of ketone bodies in urine. 3.6 Determination of glycated haemoglobin (HbA1). 3.7 Late complications of diabetes – microalbuminuria.
4	**1 Apr.**	Investigations in liver disease I– Enzymes 4.1-2 Determination of ALT or AST catalytic conncentration in serum. 5.1 Determination of total bilirubin in serum. 5.2 Detection of bilirubin in urine. 5.3 Detection of urobilinogens in urine.
6	**15 Apr.**	Laboratory diagnostics of myocardial infarction 6.1 Determination of creatine kinase ctalytic concentration. 6.2 Determination of serum CK-MB catalytic concentration. 6.3 Determination of troponin T in blood. 6.4 Determination of blood myoglobin.
7	**29 Apr.**	Investigation of plasma proteins 7.1 Determination of total protein by the biuret test. 7.2 Determination of blood albumin in serum. 7.3 Electrophoresis of serum proteins. 7.4 Assay for increased level of C-reactive protein. 7.5 Determination of serum IgE by ELISA method.
13	**13 May**	**Compensatory lesons**

29 27 May Credits.

Neglected lessons have to be made up by the 19th of June 2009.

Students are expected to come to the seminary room at least 5 minutes before the start of the lesson. Attendance in lessons 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 the given topics according to the teachers instructions.

Conditions for giving the course-unit credit

- full attendance in the all lessons
- presentation of all lab reports to the teacher

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