Information sheet for the course Examination methods in biochemistry I.

University: Alexander Dubček University of Trenčín

Faculty: Faculty of Health Care

Course unit code: VNBioch1/e Course unit title:

Examination methods in biochemistry I.

Type of course unit: *compulsory*

Planned types, learning activities and teaching methods:

Lecture: 2 hours weekly/26 hours per semester of study; full-time

Number of credits: 2

Recommended semester: 3^{rd} *semester in the* 2^{nd} *year (part-time)*

Degree of study: *I (bachelor)*

Course prerequisites: Biochemistry II.

Assessment methods:

Written or oral examination (50 score points) - for obtaining the particular grades it is necessary to achieve:

at least 45 score points for the grade A

at least 40 score points for the grade B

at least 35 score points for the grade C

at least 30 score points for the grade D

at least 25 score points for the grade E

Learning outcomes of the course unit:

The student will acquire knowledge by studying the biochemical laboratory terminology, characteristics of basic and specialized biochemical parameters, principles of their analysis and the application of theoretical knowledge in biochemistry and analytical chemistry in clinical practice.

Course contents:

- 1. Introduction to laboratory methods in clinical biochemistry
- 2. Basic urine tests
- 3. Plasma proteins
- 4. Non-protein nitrogen compounds
- 5. Determination of enzyme activity
- 6. Metabolic pathways of water, sodium, potassium and chloride, osmolarity
- 7. Metabolic pathways of calcium, magnesium and phosphorus
- 8. Acid-base balance, blood gases
- 9. Metabolic balance
- 10. Trace elements
- 11. Vitamins
- 12. Hormones

Recommended of required reading:

- 1. RACEK, J. a kol.: Klinická biochemie, Galén, 1999, 329 p. ISBN 80-7262-324-9.
- 2. ZIMA, T. a kol.: Laboratorní diagnostika, Karolinum, 2007, 906 p. ISBN 978-80-246-1423-6
- 3. MEŠKO, D., PULLMANN, R., NOSÁLOVÁ, G.: Vademecum klinickej biochémie, Osveta, 1998. 1647 p. ISBN 80-8063-005-4
- 4. SÁDECKÁ, J., NETRIOVÁ J.: Analytické metódy v klinickej chémii. Slovenská technická univerzita v Bratislave, 2008. 270 p. ISBN 978-80-227-2821-8

Language: Slovak					
Remarks: -					
Evaluation history: Number of evaluated students -					
a	b	c	d	e	f
-	-	-	-	-	-
Lectures: RNDr. Zdenka Krajčovičová, PhD.					
Last modification: 22.4.2014					
Supervisor: doc. MUDr. Jana Slobodníková, CSc.					