UNIVERSITY OF TUZLA UNIVERZITET U TUZLI

SYLLABUS

1. Course title:

CLINICAL BIOCHEMISTRY II

2. Code:

3. Cycle of study:

1

4. ECTS credits:

7

5. Type of course:

(●) Mandatory ( ) Elective

6. Prerequisites:

none

7. Class restrictions:

none

8. Duration / semester:

1 9

9. Weekly contact hours:

9.1. Lectures:	4
9.2. Seminars:	0
9.3. Laboratory/Practice classes:	3

10. Faculty:

Faculty of Pharmacy

11. Department/study program:

Pharmacy (integrated 1st and 2nd cycle)

12. Lecturer:

dr sc Zlata Mujagić, full professor

13. Lecturer's e-mail:

zlata.mujagic@untz.ba

14. Web site:

www.pharmacy.untz.ba

15. Course aims:

Acquiring knowledge about metabolic disturbances and clinical importance of nucleic acids, amino acids, proteins, cytokines, enzymes, tumor markers, carbohydrates, lipids and hormones; biochemical diagnostics of cardiovascular system, gastrointestinal system, kidneys, pregnancy, pediatrics; therapeutic drug monitoring.

16. Learning outcomes:

It is expected that students accept and understand biochemical bases of metabolic disturbances and diseases and clinical importance of nucleic acids, amino acids, proteins, cytokines, enzymes, tumor markers, carbohydrates, lipids and hormones; biochemical diagnostics of cardiovascular system, gastrointestinal system, kidneys, pregnancy; in pediatrics; therapeutic drug monitoring.
In Clinical biochemical laboratory, acquiring knowledge and skills about principles of working and analytical methods and quality control.

17. Course content:

Nucleic acids, amino acids, proteins, cytokines, enzymes, tumor markers, carbohydrates, lipids and hormones: biochemistry, diagnostics, analytical methods.
Biochemical diagnostics of cardiovascular system, gastrointestinal system, kidneys, in pregnancy, prenatal diagnostics; in pediatrics; therapeutic drug monitoring.

18. Learning methods:

Lectures, practical (experimental work in laboratory), seminars (individual or group) and consultations.
Authorized lectures will be available for students in digital form. Practical results and reports will be noted in the Practicum (Handbook) for Biochemistry.

19. Assessment methods:

Colloquial exams for practical knowledge; partial and final exam (oral or written form) for theoretical knowledge; seminars (individual or group).
Final point score is formed in a cumulative way (sum of points from all forms of knowledge checking and student activity) with the point range: 54-100 cumulative points.
If it is officially documented that a student cheated on the exam, the next exam term will be forbidden to them.

20. Assessment components:

Attendance and activity during lectures:	5 points
Attendance and activity during practical:	5 points
Colloquial I :	10 points
Colloquial II:	10 points
Test I (partial exam I):	35 points
Test II (partial exam II):	35 points

21. Required reading list:

1. Lieberman M, Marks A, Smith C. Marks' Basic Medical Biochemistry-A Clinical approach. Wolters Kluwer/ Lippincott Williams&Wilkins, Philadelphia, 2009.
2. Nada Majkić-Singh. Medicinska biohemija (Medical Biochemistry). Društvo medicinskih biohemičara Srbije (Society of Medical Biochemists of Serbia), Beograd, 2006.
3. Mujagić Z, Mujagić H. Biohemizmi stanične transdukcije signala (Biochemistry of cell signal transduction). Zlata Mujagić i Hamza Mujagić, Tuzla, 2012.
4. Lejla Begić, Selma Berbić, Zlata Mujagić, Sadik Mehikić. Praktikum iz biohemije sa teoretskim osnovama, (Practicum for Biochemistry with theoretical bases), PrintCom, Tuzla, 2004.

22. Web sources:

23. Applicable starting from the academic year:

2012/13.

24. Adopted in the Faculty/Academy session: