SYLLABUS

1. Course title:

Toxicology with Analytics II

2. Code:

3. Cycle of study:

1

4. ECTS credits:

6

5. Type of course:

(●) Mandatory ( ) Elective

6. Prerequisites:

NONE

7. Class restrictions:

NONE

8. Duration / semester:

1 8

9. Weekly contact hours:

9.1. Lectures:	2
9.2. Seminars:	0
9.3. Laboratory/Practice classes:	2

10. Faculty:

Faculty of Pharmacy

11. Department/study program:

Pharmacy (Integrated study I and II cycle)

12. Lecturer:

Maida Šljivić Husejnović, PhD, Assoc.Prof.

13. Lecturer's e-mail:

maida.sljivic-husejnovic@untz.ba

14. Web site:

www.frmf.untz.ba

15. Course aims:

The aim of this course is to introduce the special toxicology chapters.

16. Learning outcomes:

Knowledge and skills in the field of toxicology with analytics.

17. Course content:

1. Study of poisons by groups
2. Gaseous poisons
3. Volatile poisons
4. Mineral poisons
5. Plant and synthetic poisons
6. Special chapters of toxicology
7. Addictive substances
8. Pesticides
9. Chemical weapons
10. Toxins
11. Pollution of water, land and air
12. Hazardous waste
13. Food toxicology
14. Drug poisoning
15. Food poisoning

18. Learning methods:

Lectures - through interactive lectures, students get to know individual poisons, their characteristics, analytics and ways to dispose of poisoned people.
Experimental exercises - through practical experiments, students will master practical analytical skills and demonstrate the level of acquired knowledge.
Consultations - through consultations, students can solve their doubts and deepen their knowledge.

19. Assessment methods:

Pre-exam activities (minimum 55, maximum 100 points)
Class activity – 0–10 points
Practical exam – 11–20 points
Colloquium – maximum 10 points

Final exam – 32.5–60 points
Class activity:During exercises and/or lectures, the student actively participates in class and demonstrates engagement in work. Student activity is evaluated with 0–10 points.
Colloquium:On the test, the student can earn up to 10 points allocated for the material covered in laboratory exercises. The test is taken in written form and allows the student to accumulate points required for passing the course.
Exam:Students may take the exam orally and/or in written form. The exam is taken during the semester, after completing the scheduled teaching units. To pass the exam, the student must achieve 32.5–60 points. For all planned activities and knowledge checks during the semester, the student must earn a total number of points that meets the criteria for a passing grade.
If the student does not achieve a sufficient number of points within the pre-exam activities to receive a final grade, the final exam and any unpassed parts of the exam must be taken during regular and makeup exam periods.

20. Assessment components:

A student's performance is continuously monitored throughout the course and is expressed in points.

The final grade of a student after all planned forms of assessment is evaluated and graded as follows:
10 (A) - 95-100 - outstanding performance without errors or with minor errors
9 (B) - 85-94 - above the average, with some errors
8 (C) - 75-84 - average, with noticeable errors
7 (D) - 65-74 - generally good, but with significant shortcomings
6 (E) - 55-64 - meets the minimum criteria
5 (F, FX) <55 - does not meet the minimum criteria.

21. Required reading list:

1.Begić A. et al. Eksperimentalna toksikologija sa teoretskim osnovama, 2019.
2.Jokanović M. Toksikologija, 2001.
3.Mokranjac M. Toksikološka hemija, 2001.
4.Casarett. The Basic Science of Poisons, 2013.
5.Robert J et al. Fundamentals of Analytical Toxicology, 2008.

22. Web sources:

23. Applicable starting from the academic year:

2023/2024.

24. Adopted in the Faculty/Academy session:

17.11.2025.