

SYLLABUS

1. Course title:

INORGANIC CHEMISTRY

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 2**9. Weekly contact hours:**

9.1. Lectures:

3

9.2. Seminars:

0

9.3. Laboratory/ Practice classes:

2

10. Faculty:

Faculty of Pharmacy

11. Department/ study program:

Pharmacy (integrated first and second cycle of study)

12. Lecturer:

dr.sc. Aida Crnkić, full professor

13. Lecturer's e-mail:

aida.crnkic@untz.ba

14. Web site:

www.frmf.untz.ba

15. Course aims:

Through a systematic approach, students are trained to study the properties of chemical elements and their compounds based on general principles, electronic configuration, atomic size, and the type of bond between atoms. Students study the elements according to their classification in the Periodic Table, after first becoming familiar with an overview of their common properties and compounds. Special emphasis is placed on the biological significance of certain elements and their compounds, as well as their applications in medicine and pharmacy.

16. Learning outcomes:

After successfully passing the course, the student should understand the connection between the properties of chemical elements and their compounds and the position of the elements in the Periodic Table, as well as be able to apply the acquired knowledge in any other scientific field in the field of chemistry.

17. Course content:

The Periodic Table of Elements and atomic structure. Periodicity of atomic properties of elements. Nomenclature of inorganic compounds. General properties of s- and p-block elements. Noble gases. Hydrogen. Elements of Group 17 in the Periodic Table. Elements of Group 16 in the Periodic Table. Elements of Group 15 in the Periodic Table. Elements of Group 14 in the Periodic Table. Elements of Group 13 in the Periodic Table. Alkali and alkaline earth metals. General properties of d- and f-block elements. Elements of Groups 3-7 in the Periodic Table. Elements of Groups 8, 9, and 10 in the Periodic Table. Elements of Groups 11 and 12 in the Periodic Table. Biological and pharmaceutical importance of certain elements and their compounds.

18. Learning methods:

Lectures and exercises are conducted using active learning techniques, with active participation and discussion by students. Laboratory exercises are included. Attendance at laboratory exercises is mandatory and is recorded by student signatures. Student participation and activity during lectures and exercises are also recorded.

19. Assessment methods:

The methods of student assessment include the following:
Two colloquia: 10 points (First colloquium - 5 points; Second colloquium - 5 points)
Two tests: 40 points (First test - 20 points; Second test - 20 points)
Activity and seminar work: 5 points
Final exam: 45 points

20. Assessment components:

< 54,00	5	F
55,00 - 64,00	6	E
65,00 - 74,00	7	D
75,00 - 84,00	8	C
85,00 - 94,00	9	B
95,00 - 100	10	A

21. Required reading list:

Filipović I, Lipanović: "Opća i anorganska kemija II dio", 1995. Školska knjiga Zagreb, 1995.
A. Cipurković, Z. Hodžić, I. Tanjić. Preparativna neorganska hemija, Bosanska riječ, Tuzla 2010.

22. Web sources:**23. Applicable starting from the academic year:**

2023/2024.

24. Adopted in the Faculty/ Academy session:

17.11.2025.