SYLLABUS

1. Course title:

ORGANIC CHEMISTRY II

2. Code:

3. Cycle of study:

1

4. ECTS credits:

5

5. Type of course:

(•) Mandatory ( ) Elective

6. Prerequisites:

7. Class restrictions:

8. Duration / semester:

1 4

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 academic study I and II cycle)

12. Lecturer:

dr. sc. Majda Srabovic, full professor

13. Lecturer's e-mail:

majda.srabovic@untz.ba

14. Web site:

www.frmf.untz.ba

15. Course aims:

The goal of this course is for the student to master the basic principles and basic knowledge in the field of of natural organic compounds that have pharmaceutical applications. The acquired knowledge will be useful to students when solving specific problems from pharmaceutical disciplines, as well as problems related to planning and carrying out the synthesis of bioactive compounds.

16. Learning outcomes:

After fulfilling the obligations, students will be able to identify, analyze and solve problems of varying complexity, individually or as a team, use professional literature from the scientific field of organic chemistry, follow the teaching of subjects that include the structure, properties, preparation and reactions of various organic compounds.

17. Course content:

Carbohydrates, representatives, monosaccharides
Polysaccharides
Lipids, division, fats and oils
Phospholipids, terpenes
Amino acids, peptides, proteins
Alkaloids, division, the most important representatives
Steroids, division
Steroids, reactions
Polyphenol compounds

18. Learning methods:

Lectures - through interactive lectures, students will be introduced to the basic terms and principles of behavior of various heterocyclic and natural compounds, and through practical examples and problems, they will get closer to the reaction mechanisms
Experimental exercises - through specific experiments, students will demonstrate the level of acquired knowledge through lectures, and acquire skills for practical and scientific-research work.
Consultations - through consultations, students can deepen the knowledge acquired in lectures.

19. Assessment methods:

Engagement- for activity in lectures and lab exercises, a student can score a maximum of 5 points each.A colloquium consisting of theoretical foundations and performed experimental exercises. At the colloquium, a student can obtain a maximum of 10 points, the minimum number of points that must be obtained is 6.Written test of knowledge during the semester Test I and Test II include solving problem tasks. The maximum number of points on each test is 25.The final exam - A maximum of 30 points can be achieved through the written/oral knowledge test. In order to pass the course, the student must obtain the minimum number of points for a passing grade - 55 points.
The grade is based on the total number of points that the student earned by fulfilling pre-exam obligations and taking the exam, and according to the quality of acquired knowledge and skills. It contains a maximum of 100 points, and is determined according to the following scale:

Student obligations	Points	
	max.	min.
Test I	25	13
Test II	25	13
Final exam	30	16
activity at lab.exercises	5	4
colloquium	10	6
activity at lectures	5	3
Total :	100	55

20. Assessment components:

points	grade	
0-54	5	F
55 – 64	6	E
65 – 74	7	D
75 – 84	8	C
85– 94	9	B
95 - 100	10	A

21. Required reading list:

K.Peter, C.Volhardt, Neil E.Schore, Organska hemija, Beograd, 2004.
M.Huremovic, M.Srabovic Z.Ademovic,E.Huseinovic, A.Taletovic,Hemija prirodnih organskih jedinjenja, Tuzla, 2017

22. Web sources:

T.Aniszewski,Alkaloids Chemistry,Biology, Ecology and applications 2015(pdf)

23. Applicable starting from the academic year:

2023/2024.

24. Adopted in the Faculty/Academy session:

17.11.2025.