SYLLABUS

1. Course title:

Pharmaceutical chemistry and pharmacognosy

2. Code:

3. Cycle of study:

3

4. ECTS credits:

15

5. Type of course:

(●) Mandatory ( ) Elective

6. Prerequisites:

7. Class restrictions:

8. Duration / semester:

1 1

9. Weekly contact hours:

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

10. Faculty:

Faculty of Pharmacy

11. Department/study program:

Pharmaceutical sciences

12. Lecturer:

Ermina Cilović Kozarević, Assoc. Prof.

13. Lecturer's e-mail:

ermina.cilovic@untz.ba

14. Web site:

www.frmfuntz.ba

15. Course aims:

Presentation of the actual knowledge about different fields of pharmacognosy and pharmaceutical chemistry. Introduction to the scientific methods and procedures which are used in discovering of the new knowledge in pharmacognosy and pharmaceutical chemistry.

16. Learning outcomes:

Adoption of the new knowledge about different fields of pharmacognosy and pharmaceutical chemistry. Adoption to the scientific methods and procedures which are used in discovering of the new knowledge in pharmacognosy and pharmaceutical chemistry.

17. Course content:

Medicinal and poisonous herbs in BiH - selected topics. Narcotic drugs. Selected topics from traditional medicine of BiH-Prokoško lake. Phytotherapy-new approved remedies and borderline to food supplements. The use of herbs in different therapy concepts. Herbs with heterosides: saponins, flavonoids and coumarins. Essential oils: production, application and importance. Antioxidative and antimicrobial activity of essential oils. Genus Thymus as a source of pharmaceutical important products. Role and activity of the Committee on Herbal Medicinal Products (HMPC) in the European Medicines Agency (EMA)- establishing EU monographs for herbal medicines. Herbal polyphenol compounds, activity and mechanism of pharmacological action. Polyphenol compounds from species of Potentilla genus. Molecular mechanism of drug action. Introduction to QSAR studies. Synthesis, structure and assessment of biological activity of newly synthesized compounds. Peptide synthesis-Merryfield method.

18. Learning methods:

Lectures using multimedia
Students prepared essays on given topics

19. Assessment methods:

After the course is completed students are obliged to take an exam which covers the material presented during the course. The test consists of the section with multiple choice questions, and the section with the essay questions. The student can earn a maximum of 100 points on the exam.

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:

Heinrich M,Barnes J,Gibbon S,Williamson E.(2018)Funadamental of Pharmacognosy and Phytotherapy
DEBELJAK Ž,BOJIĆ M,RIMAC H(2020)Uvod u računalnu kemiju i dizajn lijekova
Davis AM,Ward SE.(2023)The handbook of medicinal chemistry-principles&practice

22. Web sources:

https://pubmed.ncbi.nlm.nih.gov/

23. Applicable starting from the academic year:

2012/13.

24. Adopted in the Faculty/Academy session:

10.05.2024.