SYLLABUS

1. Course title:

Pharmaceutical technology I

2. Code:

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3. Cycle of study:

1

4. ECTS credits:

8

5. Type of course:

(•) Mandatory ( ) Elective

6. Prerequisites:

There are no prerequsites for studing this subject.

7. Class restrictions:

None.

8. Duration / semester:

1 7

9. Weekly contact hours:

	Semester (1)	Semester (2)
	7	7
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 cycles)

12. Lecturer:

Merima Ibišević, phD; Assistant professor

13. Lecturer's e-mail:

merima.ibisevic@untz.ba

14. Web site:

www.farmacy.untz.ba

15. Course aims:

The aim of teaching of Pharmaceutical Technology I is to acquaint students with the basic principles of formulation of medicinal preparations and to acquire knowledge about the latest technological procedures for the production and testing of medicinal forms.

16. Learning outcomes:

Based on the theoretical knowledge gained in Pharmaceutical Technology I is expected to understand the methods and basic principles of formulation of medicinal preparations and the technological procedures for their preparation and testing to which they are subject.

17. Course content:

Basic technological operations (shredding, separation, merging); Physical and physico-chemical bases (solubility, density, surface tension, rheology); Excipients for the manufacture of medicinal forms and their distribution; Isotonia, isohydria and buffers; Fundamentals of biopharmacy; Medicinal forms obtained by drug extraction; Dispersion systems (emulsions, suspensions, syrups); Semi-solid medicinal forms (substrates, greases, pastes) and patches; Medicinal forms for eyes / nose / ears; Solid medicinal forms (soaps, rectal and vaginal preparations); Powders, granules, pellets (manufacture, testing); Tablets (manufacture, testing); Microparticular systems (micro- and nanoparticles, liposomes); Therapeutic systems.

18. Learning methods:

The lectures will cover the entire course material. Student attendance is mandatory. The course material will be available to students.
The experimental exercises will take place in two cycles, each ending with a colloquium. Experimental exercises are generally followed by appropriate teaching units from the class.

19. Assessment methods:

Activity - through attendance at lectures and exercises, a student can earn 0-10 points.
I and II colloquium - are done as part of laboratory exercises, and include the theory and recipes covered in the exercises. Colloquial nose maximum 10 points.
Practical exam - students make practical master's and official preparations, the practical exam carries a maximum of 20 points.
The final exam - the knowledge check implies the consolidation of the entire material covered. The maximum number of points that a student can get on the final exam is 50, and 30 points are required to pass. The exam is held in writing and/or orally.

The number of points is determined according to the following scale:
Activity 0-10
I colloquium 6-10 points
II colloquium 6-10 points
Practical exam 13-20 points
Final exam 30-50 points

20. Assessment components:

10 (A)-95-100 -outstanding performance without errors or with minor errorss
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:

Sabira Hadžović (2005), Farmaceutska tehnologija: Industrijska farmacija, Sarajevo.
Romana Senjković (1994). Osnovi oblikovanja lijekova, Školska knjiga, Zagreb.

22. Web sources:

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23. Applicable starting from the academic year:

2018/19

24. Adopted in the Faculty/Academy session:

17.11.25.