SYLLABUS

1. Course title:

Pathophysiology

2. Code:

3. Cycle of study:

1

4. ECTS credits:

5

5. Type of course:

(•) Mandatory ( ) Elective

6. Prerequisites:

no course prerequisites

7. Class restrictions:

none

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 1st and 2nd cycle)

12. Lecturer:

Selmira Brkic, full professor

13. Lecturer's e-mail:

selmira.brkic@untz.ba

14. Web site:

www.farmacy.untz.ba

15. Course aims:

- The aim of the course is to introduce students with pathophysiological events in the organism of the diseased person.
Within theoretical teaching of pathophysiology, students of pharmacy are introduced to the etiology and pathogenesis of the disease in humans.

16. Learning outcomes:

At the end of the semester, successful students, who continued to perform their duties throughout the teaching period, will be able to understand the pathophysiological mechanisms in the emergence of various disorders in the physiological functioning of individual organs and systems in humans.

17. Course content:

Introduction to pathophysiology. The terms: etiology and pathogenesis. Concept of health and disease (definition, limits of physiological parameters, adaptation, reactivity, constitution). Disease (course, phase, stages of illness). Hereditary and Congenital Diseases (Teratogenic Factors). Inheritance and environment.
Cell adaptation, intracellular accumulation and cell aging. Etiology of cell damage (lack of oxygen, physical factors, chemical factors and drugs, biological factors, immune reactions, nutritional imbalance). Biochemical mechanisms of cell damage. Necrosis of the cell.
Influence of external factors on health. The effect of modified atmospheric pressure (reduced and elevated atmospheric pressure). Function of thermal factor (clinical forms of hyperthermia, hypothermia). Febris (fever).
Water and electrolyte disturbances. Extracellular fluid volume disorders (hypovolemia and hypervolemia with special reference to etiopathogenesis of the edema). Osmotic disorders

18. Learning methods:

Different teaching methods are used in the course: Lectures (P); Laboratory exercises (LV); Seminar papers (SR). During the whole semester students are required to attend lectures (P), and laboratory exercises (LV) on a regular basis. The lecturer will monitor the presence of students during the entire semester on a specially created form. During the semester the student can maximally abstain from three lectures (3) P.

19. Assessment methods:

The score rating scale has a maximum of 5 points, and the minimum requirement for a successful course is 3 points. The test grading scale has 20 points. Test I contains questions (by type of essay and MCQ) which includes the module's contents: 1, 2 and 3. The Test II contains questions (by type of essay and MCQ) that includes the module's contents: 4 and 5.
Each test contains 30 MCQ questions and 2 essay type questions. Each MCQ question is 0.5 points, and the question of the type of essay is 2.5 points. The minimum requirement for a successful test is 16 points.

Student Obligations Points
Attendance at Class 3
Seminar 2
Colloquium I 5 (min.3)
Test I 20 (min.12)
Colloquium II 5 (min.3)
Test II 20 (min.12)
Final Exam 45

20. Assessment components:

<60 Pet (5) F
60-70 Six (6) E
71-79 Seven (7) D
80-88 Eight (8) C
89-94 Nine (9) B
95-100 Ten (10) A

21. Required reading list:

S Gamulin, M Marušić, Z Kovač i suradnici. PATOFIZIOLOGIJA, VII izdanje, Medicinska naklada, Zagreb, 2010.
2. S. Brkić, PATOFIZIOLOGIJA, praktikum sa teoretskim osnovama, Harfograf Tuzla, 2009.
3. Z Kovač, S Gamulin i suradnici. PATOFIZIOLOGIJA

22. Web sources:

23. Applicable starting from the academic year:

2012/2013

24. Adopted in the Faculty/Academy session: