

SYLLABUS

1. Course title:

ECOLOGY IN ENVIRONMENTAL PROTECTION

2. Code:**3. Cycle of study:**

1

4. ECTS credits:

3

5. Type of course: Mandatory Elective**6. Prerequisites:****7. Class restrictions:****8. Duration / semester:**

1

5

9. Weekly contact hours:

9.1. Lectures:

2

9.2. Seminars:

0

9.3. Laboratory/Practice classes:

1

10. Faculty:

Faculty of Technology

11. Department/study program:

Environmental protection engineering

12. Lecturer:

Abdel Dozić, Ph.D., assistant professor

13. Lecturer's e-mail:

abdel.dozic@untz.ba

14. Web site:

www.tf.untz.ba

15. Course aims:

The objective of the course is to introduce students with the basics of ecology and relationships in their environment. Throughout the course, students will be able to acquire specific knowledge about the connections between living beings and living space or the environment, and that these knowledge will be used for further study.

16. Learning outcomes:

Students will acquire basic knowledge of the basic characteristics of the environment, with special emphasis on the role of a man in maintaining the balance in the biosphere, all with the aim of raising the students' ecological awareness.

17. Course content:

Concepts, Tasks and Content of Ecology, Ecology and Methods of Ecology and its Relation to Other Sciences, Ecological Factors, Schedule in Ecological Systems, Population and Growth, Biocenosis, Relationships and Types of Nutrition and Nutrition Chains, Metabolism of Ecological Systems, Atmosphere, Greenhouse Gases, Greenhouse Effect, Ozone, Ozone Hole, Hydrosphere, Lithosphere, Biosphere, Circulation and Energy Flow, Biogeochemical Cycles, Organic Production, Bioresource Management, Ecological Properties and Living Areas of Land Ecological Systems, Biocological and Ecological Characteristics of Liquid Water, Standing Water, Groundwater and the Sea, Main Areas of Practical Ecology Application, Major Disorders in Human Impacting Environmental Systems.

18. Learning methods:

Teaching methods are based on multimedia lectures and laboratory exercises. In the lectures the problems are framed and the facts are analyzed and theoretically approaches the problem, and the exercises are done in interactive form and through practical work within laboratory exercises. Teaching methods imply active participation of students, work in the lab and visits to manufacturing and service organizations.

19. Assessment methods:

Throughout the course, students are required to attend lectures and exercises on a regular basis, which will be monitored by the subject teacher and associates and, on special forms, keep records. During the semester, the student can be absent from a maximum of three lectures and three exercises, being obliged to bring proof of justification of absence (medical certificate, etc.). In the case of more unexcused absences, the student loses the right to the signature of the teacher.

- TESTS - Two tests throughout the semester for the oral exam. Each test consists of a maximum of 20 short theoretical questions related to the previously processed material and carries 15 points (for a passing grade, one should achieve a minimum of 8 points). Tests are usually conducted after every six weeks of classes, whereby the subject teacher will announce them to the students at least two weeks before each test.

LABORATORY EXERCISES: the student is obliged to do all laboratory exercises, and based on activity in exercises can achieve a maximum of 25 points (for a passing grade should achieve a minimum of 12 points).

- FINAL PART OF THE EXAM - Students who have collected the minimum required number of points for the pass grade (54 points) by all criteria, have the right on deserved grade or to use the option of additional (verbally or in writing) exam for a higher final grade. The maximum number of points that can be obtained on the final exam is 30. The minimum number of points, which must be reached on the final exam is 18.

All the students who did not meet the conditions in one of the tests or who are not satisfied with the grade, but who have completed all other obligations of the course (have the signature of the subject teacher in the index) take the final exam. The student can not get a final grade if he has not passed both tests.

- SEMINAR WORK OF STUDENTS: students have the opportunity to do one seminar work. Successfully prepared and defended seminar work is evaluated with a maximum of 10 points (minimum 6 points), which are added to the total number of points achieved on other bases in the formation of the final grade.

20. Assessment components:

The final grade is based on the total number of points obtained through pre-requisites and the final exam, according to the quality of the acquired knowledge and skills. It contains a maximum of 100 points, according to the following scale:

Regularity of teaching attendance (lectures + exercises): 5 points

Activity in laboratory exercises: 25 points

Tests (theory): 30 points

Seminars: 10 points

Final Exam: 30 points

21. Required reading list:

Klepac R (1980). The Basics of Ecology, Medical Publishing, Zagreb,

Đikić D i sar, (2001). Ecological Lexicon, BARBAT, Zagreb,

Selimbašić V, Đozić A (2013). The basics of ecology and environmental protection, OFF-SET, Tuzla

22. Web sources:

www.ekologija.ba

23. Applicable starting from the academic year:

2015/2016

24. Adopted in the Faculty/Academy session: