

## SYLLABUS

**1. Course title:**

Comfort of the working environment

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

1

**4. ECTS credits:**

6

**5. Type of course:** Mandatory  Elective**6. Prerequisites:**

no prerequisites

**7. Class restrictions:**

no class restrictions

**8. Duration / semester:**

1

5

**9. Weekly contact hours:**

9.1. Lectures:

3

9.2. Seminars:

0

9.3. Laboratory/Practice classes:

3

**10. Faculty:**

Faculty of Technology

**11. Department/study program:**

Environmental protection engineering

**12. Lecturer:**

Abdel Dozić, assistant profesor

**13. Lecturer's e-mail:**

abdel.dozic@untz.ba

**14. Web site:**

www.tf.untz.ba

**15. Course aims:**

Acquiring theoretical knowledge in the field of physical and chemical hazards in the work environment.  
Understanding the engineering approach in the analysis and application of protection measures in working and auxiliary facilities.  
Mastering the microclimate parameters of the working environment.

**16. Learning outcomes:**

Identifies and Benefits Legislation Regulating the Limits of Physical, Chemical and Biological Hazards in the Workplace.  
Identifies and estimates the degree of environmental threats.  
Use measured instruments and determine the working environment.  
It analyzes and comments on the results of measurement of physical, chemical and biological hazards in the work environment.  
Create a report on the measurement of the comfort of the working environment

**17. Course content:**

Comfort of the working environment (definition, parameters, criteria and standards). Determination of comfort status (measurement of comfort parameters and reporting). Microclimatic parameters (pressure, temperature, relative humidity). Basic concepts and sizes for describing vibrations. Kinematics and vibration dynamics. Basic principles of formation and transmission of vibration. Vibration Impacts on Man. Vibration of the arm system - arm. Basic concepts and physical size for noise description. Formation and proliferation of open-air noise. Pointless sources of noise. Sound pressure, sound intensity and sound power. Soundproofing. Basic principles of noise protection. Measurement and noise regulation. Basic concepts and sizes for dust measurement. Basic principles of dust protection. The term chemical chemistry parameters.  
Classification of chemical parameters based on the type of harm - toxic parameters. Standards and recommendations for permitted values of chemical parameters.

**18. Learning methods:**

The following activities of successful learning are planned: concrete experience and reflection. Learning styles are preferred: visual style, auditory, logical-mathematical and stand-alone. The most important learning methods in the subject are:

- Lectures with the use of multimedia resources, active learning techniques and with active participation and student discussion;
- Experimental exercises

**19. Assessment methods:**

Throughout the course, students are required to regularly attend lectures and exercises. Students' attendance records will be regularly kept. On a special form, the subject teacher will continuously monitor the presence of each student. During the semester, the student can maximally abstain from three lectures and three exercises, where he is obliged to provide evidence of justification of non-attendance (medical certificate, and the like). In case of multiple unjustified absences, the student loses the right to sign the subject teacher.

- TESTS - Two tests during the semester for the oral exam. Each oral exam test consists of 20 short theoretical questions related to the material being studied and carries 15 points (min passage 8 points). The tests are performed approximately every six weeks of instruction, and the subject teacher will announce them to the students at least two weeks before each test.
- LABORATORY EXERCISES: the student is obliged to undertake all laboratory exercises and by exercising on the exercises he can achieve a maximum of 25 points (min. Passage 12 points).
- FINAL PART OF THE EXAM - Students who have compiled the required number of points according to all criteria (54 points) have the possibility to additionally (verbally or in writing) correspond to a higher closing score. The maximum number of points that can be reached on the final exam is 30. The minimum number of points to be compulsory on the final exam is 18.

All the students who did not meet one of the tests or who are not satisfied with the grade and who have completed all the obligations on the subject (have the signature of the subject teacher in the index) approach all exams. A student can not enter a grade if no tests have been passed.

- 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 has a maximum of 100 points, according to the following scale:

Classroom attendance (P + V): 5 points

Activity in laboratory exercises: 25 points

Tests (theory): 30 points

Seminar work: 10 points

Final Exam: 30 points

**21. Required reading list:**

Popović, D. (2008). Chemical and environmental parameters. Faculty of Occupational Safety, Niš

Cvetković, D., Prašević, M. (2005). Noise and vibration. Faculty of Occupational Safety, Niš

**22. Web sources:****23. Applicable starting from the academic year:**

2015/2016

**24. Adopted in the Faculty/Academy session:**