

SYLLABUS

1. Course title:

PROTECTION FROM NOISE AND VIBRATIONS

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

1

4. ECTS credits:

5

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

1

7

9. Weekly contact hours:

9.1. Lectures:

2

9.2. Seminars:

0

9.3. Laboratory/Practice classes:

2

10. Faculty:

Faculty of Technology

11. Department/study program:

Environmental Protection Engineering

12. Lecturer:

Abdel Dozić, associate professor

13. Lecturer's e-mail:

abdel.dozic@untz.ba

14. Web site:

www.tf.untz.ba

15. Course aims:

The aim of the course is to give students the knowledge and practical experience in the field of physical harms (noise and vibration) in the workplace. Training to address the specific problems of equipment for work through identification and control of noise and vibration.

16. Learning outcomes:

Based on the knowledge gained during the course, students will be familiar with the physical principles of vibration and noise generation, and by measuring the noise level in the working environment and the vibration of the work equipment. The acquired knowledge is necessary for the application of noise and vibration control methods for diagnostic purposes.

17. Course content:

Vibrations as a physical phenomenon. The effects of vibration. Application of Personal Protective Equipment. Measurement of vibration of work equipment. Instrumentation for vibration measurement. Basic principles of vibration isolation. Protection of working equipment from vibrations. Vibration protection in motor vehicles. Noise as a physical phenomenon. The effects of noise. Application of Personal Protective Equipment. Measurements and noise analysis in the working environment. Instrument for measuring noise level. Measurement and analysis of work equipment noise. Measurement of motor vehicle noise levels. Noise in the working environment. Noise in motor vehicles.

18. Learning methods:

lectures (through interactive lectures to introduce students with the influence of different sources of pollution on the environment and human health, with the basics of governance and legislation, the basic processes and operations applied in the processing of waste streams)
auditorial exercises (group solving of given problems, visits to industries)
seminar (group solving of given problems)
consultations- through consultations, students can deepen the knowledge acquired at lectures.

19. Assessment methods:

Throughout the course, students are required to regularly attend lectures and exercises, which will be continuously monitored and kept on special forms by the subject teacher and associates. During the semester, the student can be absent with 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. Each test consists of maximum 20 simple questions related to the previously processed material and carries 20 points (for a passing grade, one should achieve a minimum of 11 points). Tests are usually conducted after every six weeks of lectures, 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 13 points).
- FINAL PART OF THE EXAM - Students who have collected the required number of points by all criteria (54 points), have 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.

20. Assessment components:

The final grade is based on the total number of points obtained through prerequisites 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:

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

Activity in laboratory exercises: 25 points

Tests (theory): 40 points

Final exam: 30 points

21. Required reading list:

Cvetković D, Praščević M (2005). Buka i vibracije, Fakultet zaštite na radu, Niš.

Simović M i sar, (1982). Buka - štetna dejstva, merenje i zaštita, Institut za zaštitu na radu, Niš.

Borojev LJ i sar, (2009). Zaštita na radu od buke i vibracija.

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

2015/2016

24. Adopted in the Faculty/Academy session: