SYLLABUS

1. Course title:

Pressure vessels and pipelines

2. Code:

3. Cycle of study:

1

4. ECTS credits:

4

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:	1
9.3. Laboratory/Practice classes:	0

10. Faculty:

Faculty of Technology

11. Department/study program:

Environmental Protection Engineering

12. Lecturer:

assoc. prof. Gordan Avdić, PhD

13. Lecturer's e-mail:

gordan.avdic@untz.ba

14. Web site:

www.tf.untz.ba

15. Course aims:

The aim of the course is to teach students about the possible breakdowns of equipment in the plant process industries related to pressure vessels and pipelines and the causes and consequences of their occurrence. Students will learn modern methods and devices to ensure safe operation and Preventing the occurrence of breakdowns.

16. Learning outcomes:

Knowledge and understanding of the problems, engineering analysis of the problem, engineering approach to problem solving using computers, preparing for the research, the basic elements of engineering practice.

17. Course content:

Presentation of course syllabus. Overview of technical regulation in the area of security of pressure equipment. Meaning of Inspection Control. Ensuring safety when designing and manufacturing equipment. Control of construction solutions and materials. Ensuring reliable operation of separating and inseparable compound materials. Pressure testing. Creating technical documentation. Safety device overview: choice of construction design and installation methods. The concept of 'leakage before fracture "of pressure equipment. Fracture Analysis Diagram (FAD).

18. Learning methods:

Lectures using multimedia resources, techniques of active learning with active participation and discussion of students, exercises on computers.

19. Assessment methods:

After half of the semester, students write a test (first inter-exam) that covers up to date topics from lectures and exercises and can reach up to 20 points. After completing the semester, the students write a test (second inter-exam) which covers the topics covered by the lectures and exercises and can achieve a maximum of 20 points.The final exam is written. On the final exam a student answers 10 questions from the program of the subject treated in lectures and exercises. Each correct answer is scored with 5 points. The final exam can be passed if the student has won 26 points. The maximum number of points a student can achieve at the oral exam is 50.

20. Assessment components:

Rating exam is based on the total number of points a student earned by completing pre-exam requirements and exams, according to the quality of the acquired knowledge and skills, and contains a maximum of 100 points, and is determined according to the following scale (points):

Attendance at lectures 3
Attendance at Exercises 4
Student activity 3
Tests 40
Total prerequisites given 50
Final Exam 26-50

21. Required reading list:

Putić, S. (2008) Proračun, izrada i eksploatacija opreme u procesnoj industriji, interna skripta Katedre za OTN, Beograd
Kohan, A.L. (1987) Pressure Vessel Systems, McGraw-Hill Book Comp.

22. Web sources:

23. Applicable starting from the academic year:

2015/16

24. Adopted in the Faculty/Academy session: