SYLLABUS

1. Course title:

Standardization, Certification and Accreditation

2. Code:

3. Cycle of study:

1

4. ECTS credits:

3

5. Type of course:

○ Mandatory ◉ Elective

6. Prerequisites:

no prerequisites

7. Class restrictions:

no class restrictions

8. Duration / semester:

1 8

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 Đozić, assistant profesor

13. Lecturer's e-mail:

abdel.dozic@untz.ba

14. Web site:

www.tf.untz.ba

15. Course aims:

Getting acquainted with the system of standardization, certification and accreditation.
Master the process of producing documentation for obtaining certification
Provide procedures for obtaining certification and accreditation for laboratories.

16. Learning outcomes:

Distinguish the terms of standardization, certification and accreditation.
Use domestic and international standards.
Develop a certification plan and program according to the requirements of BAS ISO 14001 and BAS ISO 9000: 2008.
Define conditions to be met by laboratories for accreditation according to BAS ISO / IEC 17025: 2006.
Generate basic documentation for the accreditation system according to BAS ISO / IEC 17025: 2006.

17. Course content:

Standardization: Basic concepts of the standardization system. National and International Standards, International Standards Organizations. Harmonized standards, industry standard. Forms of standard document, statutory standard. Adopting standards. Structure of BiH standardization.
Certification: General terms. Certification subject. Procedures, institutions, systems, independent certification institutions. Domestic and European regulations. Documentation, Inspection, Surveillance, Documents, Certification and Supplier Statements. Certification marks, classification marks.
Accreditation: General terms in the system of proof of competence. Accreditation system. European approach to demonstration New Approach, Global Approach, removal of technical barriers. BiH Accreditation System. BiH standards related to accreditation of BAS ISO 14001, BAS ISO 9000 and BAS ISO / IEC 17025: 2006. Preparation of documentation for accreditation of laboratories according to requirements of BAS ISO / IEC 17025: 2006.

18. Learning methods:

The following activities of successful learning are planned: concrete experience and reflection. Learning styles are preferred: visual style, auditive 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 come to 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 per semester for the oral exam and two tests for the written part of the exam, ie a total of 4 tests. Each oral exam test consists of 20 short theoretical questions related to the material being studied and carries 15 points (min passage 8 points). Each exam test test consists of four assignments related to the course material and carries 15 points (minimum pass 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.
• 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 5 points (minimum 3 points), which are added to the total number of points achieved on other grounds 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, P. (2010) Akreditacija i ocenjivanje usaglašenosti: Beograd, Univerzitet Singidunum
BAS ISO/IEC 17025:2006. Opći zahtjevi za kompetentnost ispitnih i kalibracionih laboratorija

22. Web sources:

http://www.sistemqualitas.com/organizacija
http://www.bas.gov.ba

23. Applicable starting from the academic year:

2015/2016

24. Adopted in the Faculty/Academy session: