SYLLABUS

1. Course title:

Managing accident risks

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 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:

Chemical Engineering and Technologies / Chemistry and Engineering of Materials

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:

The objective objective of the course is to introduce students with the basic engineering and organizational principles required to manage and minimize environmental risks. During the course, students will be able to acquire specific knowledge in conducting assessment and action procedures in case of accidental occurrence. Analyzing techniques, technologies and organizational measures aimed at preventing accidental threats to man, property and environment, and minimizing the consequences of accidents.

16. Learning outcomes:

Students will acquire basic knowledge about the risks, accidents, estimates and methods of action due to the occurrence of accidents upon enrollment. Students' ability to recognize quantitative and qualitative risk characteristics that carry accient situations and their environmental consequences based on the properties of non-control substances can be found in different media environments.

17. Course content:

Definition of risks, hazards, accidents and disasters International and domestic normative-legal regulations for risk management. International standards and guidelines for their application. Risk Management Models in the Environment. Indicators and Risks in the Environment. Determining the level of risk. Determining internal and external sources of risk. Choice and application of risk identification instruments. Risk management. Identification of risks. Risk evaluation. Basic risk assessment methodologies and their application in practice examples. Basic principles and methodologies for assessing ecological risk. Characterization and estimation of pollution sources. Contamination through environmental media. Assessment of population exposure.Control risk. Define appropriate risk management measures. Choice of strategy. Risk prevention. Risk Compensation. Incidents and Crisis Staff. Early Warning Systems. Organizational demands, communication and motivational factors in crisis management.

18. Learning methods:

Learning 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:

After the seven weeks of the semester, students write a written test covering the subject of the lecture. The first test student can achieve a maximum of 15 points. After the second third of the semester, the students write a written test that covers the topic covered by the lectures in this part of the semester. The second test student can achieve a maximum of 15 points. For a continuous check through the colloquium during the whole semester, the student can achieve a maximum of 20 points. After completing the semester, students are given a final exam in writing, which includes the remaining lecture topics. The test consists of questions from the theory. The maximum number of points a student can achieve on the final exam is 40. Checks on all forms of knowledge are recognized as a cumulative exam if the result is positive after each individual check.
To qualify for a course must have at least 54 points.

20. Assessment components:

The price of the exam is based on the total number of points by filling in the exam and pre-requisites:

	min. point.	max. point.
Attendance at lectures	3	5
Attendance at Exercises	3	5
Columns	11	20
Tests	16	30
Final Exam	21	40

21. Required reading list:

Lerche I, Glaesser W,(2006). Environmental Risk Assessment, Springer Verlag;
US Environmental Protection Agency: General Risk Management Program Guidance;
Priručnik za izradu procjene opasnosti u malim i srednjim poduzećima

22. Web sources:

http://yosemite.epa.gov/oswer/cepp

23. Applicable starting from the academic year:

2015/2016

24. Adopted in the Faculty/Academy session: