

SYLLABUS

1. Course title:

Designing in the industry

2. Code:**3. Cycle of study:****4. ECTS credits:****5. Type of course:** Mandatory Elective**6. Prerequisites:****7. Class restrictions:****8. Duration / semester:****9. Weekly contact hours:**

9.1. Lectures:

3

9.2. Seminars:

0

9.3. Laboratory/Practice classes:

2

10. Faculty:

Faculty of Technology

11. Department/study program:

Chemical Engineering and Technologies, Food Technology, 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:

Acquisition the theory and techniques for the development of new or reconstruction of existing industrial processes and plants, which are the main factors for achieving production in the industry. The aim of the course is, also, through lectures and exercises to introduce students to the design of the plant set different actions of professional character, spent exact methods appropriate for each process.

16. Learning outcomes:

Knowledge and understanding of problems, engineering analysis of problems, engineering approach to problem solving, research in the field of chemical engineering, engineering practice.

17. Course content:

The basics of information technology. Software. Hardware. Spreadsheets. Databases. Evaluation of data from the Internet. Organization of a computer data processing system. System Elements for Computer Data Acquisition and Process Management.

18. Learning methods:

Lectures using multimedia resources, techniques of active learning with active participation and discussion of students, laboratory 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:

Žarko Olujić, Franc Šef: Projektiranje procesnih postrojenja
Coulson & Richardson, R.K. Sinnott: Chemical Engineering, Volume 6, Chemical Engineering Design
Eduard Beer: Priručnik za dimenzioniranje uređaja kemijske procesne industrije

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

2015/16

24. Adopted in the Faculty/Academy session: