

SYLLABUS

1. Course title:

Applied computing

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:

2

9.2. Seminars:

0

9.3. Laboratory/Practice classes:

1

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:

Acquirement of basic skills and competences related to the organization of computers as data processing devices, training in the use of selected software. Understanding the Principles of Computer System Data Processing and Process Management. Approach to solving the set of simple engineering problems on the computer as a starting point for more complex applications.

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:

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:

Dragojlović, P. (1987) Informatika, Školska knjiga, Zagreb,
MS Excel - Spreadsheets creating,
MS Access Relational Databases,
National instruments (1995) Data Acquisition and Control, Austin, USA,
Written materials from lectures

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

2015/16

24. Adopted in the Faculty/Academy session: