

SYLLABUS

1. Course title:

Planning and management of industrial production

2. Code:**3. Cycle of study:**

1

4. ECTS credits:

6

5. Type of course: Mandatory Elective**6. Prerequisites:**

No prerequisites

7. Class restrictions:

No class restrictions

8. Duration / semester:

1

7

9. Weekly contact hours:

9.1. Lectures:

3

9.2. Seminars:

0

9.3. Laboratory/Practice classes:

1

10. Faculty:

Faculty of Technology

11. Department/study program:

Chemical Engineering and Technologies

12. Lecturer:

Sabina Begic, associate professor

13. Lecturer's e-mail:

sabina.begic@untz.ba

14. Web site:

www.tf.untz.ba

15. Course aims:

1. Introduction to the basic principles and principles of industrial production planning;
2. Understanding the organization of a manufacturing plant;
3. Acquiring knowledge about influencing factors of production management and ways of analyzing them;
4. Getting acquainted with the concept of quality management system;
5. Training for the application of theoretical knowledge in practice;

16. Learning outcomes:

After completing the course, students will be able to:

1. Create a production system project
2. Select the most appropriate production process with regard to the economic aspect and the quality of the finished product;
3. Determine the optimum distribution of process equipment in the production process;
4. Apply basic planning techniques in production (gantt chart, network diagram);
5. Identify the critical control points of the production plant and draw up a plan of their control;
6. Draft documentation of the management system;
7. Prepare the technical diagnostics of the system.

17. Course content:

Characteristics of industrial production systems; Choice of technology; Analysis of process flow and organization structure; Spatial distribution of resources for work; Quality production management and quality control; Analysis and evaluation of technical systems; Preventive and corrective measures; Prediction and capacity planning; Research and development.

18. Learning methods:

Lectures using multimedia resources, active learning, case studies, field exercises, preparation and presentation of group seminar papers.

19. Assessment methods:

Testing of students' knowledge is carried out by the following methods: tests, seminar work and final exam. After half of the semester, students take the first writing test, which includes previously treated topics from lectures. The test consists of tasks of simple recollection. Each correct answer is scored with 2 points, ie the student can score up to 20 points on the first test. In the last week of the semester, students take the second writing test, which includes previously treated topics from lectures from the second part of the semester. Each correct answer is scored with 2 points, ie the student can score up to 20 points on the second test. All students take both tests on the subject at the same time, thereby achieving uniformity of the level of knowledge that is being tested, as well as the conditions under which the student takes the exam. As part of the prerequisites, students are required to prepare group seminar work that will cover a specific topic from the content of the subject. Seminar in writing is submitted to the subject teacher for review and evaluation, and then presented orally. In the preparation and presentation of group seminar work all the students of the group participate, whose participation is valorized individually. For the prepared and presented seminar work, the student can achieve 0 to 10 points.

The final exam is in written form and consists of questions that cover the entire course. The maximum number of points a student can earn on a written exam is 50.

Checks on all forms of knowledge are recognized as a cumulative exam. In order for a student to pass a subject, he must have a minimum of 54 cumulative points.

20. Assessment components:

The grade at the exam is based on the total number of points the student has obtained by fulfilling the pre-requisites and passing the exam according to the quality of the acquired knowledge and skills, and it contains a maximum of 100 points and is determined according to the following scale:

Student obligations	Points
First test	0-20
Second test	0-20
Seminar paper	0-10
Final Exam	0-50

21. Required reading list:

1. Schroeder, R.G. (1999) Upravljanje proizvodnjom, odlučivanje u funkciji proizvodnje. Zagreb: Mate d.o.o.
2. Vollmann, T.E.; Berry, W.L., Whybark, D.C. (1992) Manufacturing planning and control systems. Chicago: Irwin, Inc.

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

2015/2016

24. Adopted in the Faculty/Academy session: