SYLLABUS

1. Course title:

TECHNOLOGY AND QUALITY CONTROL OF SUGAR AND STARCH

2. Code:

3. Cycle of study:

1

4. ECTS credits:

3

5. Type of course:

○ Mandatory ◉ Elective

6. Prerequisites:

7. 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:

Food Quality and Safety

12. Lecturer:

Dijana Miličević

13. Lecturer's e-mail:

dijana.milicevic@untz.ba

14. Web site:

www.tf.untz.ba

15. Course aims:

Introducing students into the basics of sugar and starch technology. Students will be familiar with the preparation of raw materials and sugar production, as well as the intermediate products and byproducts arising during the production process. The course will describe the composition and composition of starch, and the significance of starch. In addition, starch production processes from different raw materials, as well as products derived from starch, especially syrups and sweeteners, will be described in the food industry.

16. Learning outcomes:

Knowledge and understanding of problems, engineering problem analysis, engineering approach to problem solving, preparation for research, engineering practice.

17. Course content:

Quality control of input raw materials; Cleaning beet and preparing for extraction
Extraction of beet juice
Filtration, saturation, defect
Evaporation, crystallization
Production of white sugar; Quality control of the finished product (crystal sugar, powdered sugar, shaped sugar)
Molasses - properties, use, quality control
Storage of sugar
String - The Material, Chemical and Physical Properties
Raw materials for starch and quality control of input raw materials
Production of starch from wheat, corn, potato, rice
Modified starches
Production of syrups and starch sweeteners
Quality control of starch and starch products

18. Learning methods:

Lectures.
Consultations.
Laboratory and practice classes

19. Assessment methods:

Students put 2 partial tests: the first half of the semester, which includes the material that was then shed and the other at the end of the semester with the remaining material after the first partial test. Tests consist of 10 questions, each correct answer is 5 points. Both tests put all the students on the subject at the same time, thereby achieving the level of knowledge that is being tested and the conditions under which the student takes the exam. The final exam is oral. At the final exam, the students draw out the cards on which the 10 questions from the curriculum program are handled in the lectures. Each correct answer is scored in the range of 5 points, depending on the demonstrated knowledge. The final exam can be passed if the student has won 26 points. The maximum number of points a student can earn on an oral exam is 50.

20. Assessment components:

The assessment of the exam is based on the total number of points the student has achieved by fulfilling the pre-requisites and passing the exam, 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):

Presentation of lectures 4
Presentation of practice 6
Tests 40
Total prepayments 50
Final Exam 26-50

21. Required reading list:

1. Sadadinović, J. (1999): Organska tehnologija, knjiga 2 Prehrambena industrija, Tehnološki fakultete Tuzla.
2. Bešlagić, S. (1999): Tehnologija prerade žita, skroba i šećera, IP Svjetlost, Sarajevo

22. Web sources:

23. Applicable starting from the academic year:

2015/16

24. Adopted in the Faculty/Academy session: