

SYLLABUS

1. Course title:

FOOD PRESERVING

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:

9.2. Seminars:

9.3. Laboratory/Practice classes:

10. Faculty:

FACULTY OF TECHNOLOGY

11. Department/study program:

Food Technology

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 food preservation. Students will be familiar with basic concepts related to food preservation. The basic methods used to extend the life of the foodstuff, or to preserve and process it, will be described on the subject. All this will serve as an introduction to the courses to be heard in the fourth year, in which will be described the ways of processing these raw materials.

16. Learning outcomes:

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

17. Course content:

Introduction in basic principles of preserving
Food preserving of thermal sterilisation
Food preserving of cooling and freezing
Concentration and drying – methods of preserving (freeze-drying, drying, evaporation)
Concentration of membrane processes (ultrafiltration, reverse osmosis)
Biological preserving and preserving of additions
Minimal processing food in function of preserving
Non-thermal methods preserving food – high pressure, pulsing electric field, oscillate magnetic field, pulsing light, etc.)

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 5 questions from the curriculum program are handled in the lectures. Each correct answer is scored in the range of 10 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. Clydesdale, F. M. (2001) Food shelf life stability, Chemical, biochemical and microbiological changes, CRC Press LLC.
2. Heldman, D. R. and Hartel, R. W. (1998) Principles of Food Processing, Chapman and Hall.
3. Herceg, Z. (2011), Procesi u prehrambenoj industriji, Prehrambeno-procesno inženjerstvo 1, Plejada, Zagreb
4. Lovrić T. (2003): Procesi u prehrambenoj industriji s osnovama prehrambenog inženjerstva, Sveučilište u Zagrebu, HINUS, Zagreb

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

2015/16

24. Adopted in the Faculty/Academy session: