SYLLABUS

1. Course title:

QUALITY CONTROL OF ADDITIVES

2. Code:

3. Cycle of study:

1

4. ECTS credits:

3

5. Type of course:

○ Mandatory ◉ Elective

6. Prerequisites:

Knowledge gained from the natural sciences.

7. Class restrictions:

Students Department of Food Technology, Quality and Food Safety

8. Duration / semester:

1 7

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 Technology/Food Quality and Safety

12. Lecturer:

Ramzija Cvrk, Associate Professor, PhD.

13. Lecturer's e-mail:

ramzija.cvrk@untz.ba

14. Web site:

www.tf.untz.ba

15. Course aims:

- Introduction of students with the use of food additives, the importance of proper selection and proper use of food additives.
- Gaining of knowledge in the field of regulations (B&H and the EU), which regulate the use of additives in the food industry, the regulations on the type and the division of food additives according to the purpose.
- Gaining of knowledge necessary for quality control of the additive and the standard method for analyzing the quality of the additive.
- Gaining of knowledge related to the effect of individual groups of additives on human health, and introducing to safety aspect of food product related to the use and dosage of additives.

16. Learning outcomes:

- Understand what are food additives, their distribution and function. Understand the legal regulations concerning the quality, distribution and use of additives.
- Gaining skills to analyze of quality various aspects of additive (chemical / physical / microbiological / toxic).
- Understand the application of standard methods for quality control additives, control of the presence of food additives, to be able to choose the appropriate method for the investigated parameters.
- Understand the importance of quality control and the application of additives in terms of food safety and the impact on human health.

17. Course content:

Food Additives: classification and function. The role of the Codex Alimentarius, FAO and WHO in control and health safety of additives. Consideration of additives in groups: health safe and less safe additives. The legislation related to food additives (B&H, EU) to regulating the status of additives in terms of health safety, classification of additive according to their functions, dosage recommendations, positive and negative list of additives. Labeling of the additives. Groups of foods that usually contain additives that are less safety to health. Quality control of additive. Standard methods for the determination of certain groups of additives. Quality control additives prior to use in the production of foods: chemical composition, physical properties, microbiological safety, toxicity, etc. Quality control of additives present in the food. Standard methods for analyzing the concentration of additive in the product, according to group (preservatives, coloring agents, antioxidants, etc.).

18. Learning methods:

- Interactive lectures using of modern techniques.
- Consultations of students in a group and individually.
- Visits to industrial plants.
- Writing of seminars.

19. Assessment methods:

After the first half of the semester (seventh or eighth week) students take the first test (midterm), which includes previously treated topics (lectures and exercises). The test consists of 20 questions related to the treated topics. Each question is scored with 1 point. In the first test, the student can get min 11 points and max 20 points. After the end of the semester students take the second test which includes previously treated topics (lectures and exercises). The test consists of 20 questions related to the treated topics. Each question is scored with 1 point. On the second test, a student can also get min 11 points and maximum 20 points. Both tests taken by all students at the same time. The final exam is oral. Final exam is open to all students who have completed all the experimental exercises and passed the final colloquium after the exercise, and passed both a written test (midterm exam). The final oral exam student can get min 26 points, max 50 points. Students who have not passed the written tests, will have the possibility to take the written tests at the time of the final exam, provided they finished preexamination obligations (completed the experimental exercises and passed the final test, and regularly attending classes/lectures). For total success achieved at the exam a student can get min 54 points and max 100 points.

20. Assessment components:

Students obligations:	Points:
Attendance and activity in class:	min 3 - max 5
Laboratory exercises and a final colloquium:	min 3 - max 5
Written test I (first test):	min 11- max 20
Written test II (second test):	min 11- max 20
Final test (written / oral):	min 26 - max 50

Note: For each of these obligations the student must have a min 54% of the maximum specified points.

21. Required reading list:

1. Modić P. (2001): Upotreba prehrambenih aditiva,Poljo-knjiga, Beograd.
2. Manuals of food quality control. Additives contaminants techniques. Food and Agriculture Organization of the United Nations.

22. Web sources:

http://www.eufic.org/article/en/food-safety-quality/food-additives/expid/basics-food-additives/
http://www.fao.org/docrep/014/AM808E/AM808E.pdf

23. Applicable starting from the academic year:

2015/2016

24. Adopted in the Faculty/Academy session:

(max. 10 char.)