SYLLABUS

1. Course title:

INTRODUCTION TO ECOLOGICAL AGRICULTURE

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 3

9. Weekly contact hours:

9.1. Lectures:	3
9.2. Seminars:	0
9.3. Laboratory/Practice classes:	2

10. Faculty:

Faculty of Technology

11. Department/study program:

Agronomy

12. Lecturer:

Vahida Selimbašić, full professor

13. Lecturer's e-mail:

vahida.selimbasic@untz.ba

14. Web site:

www.tf.untz.ba

15. Course aims:

Students will be able to demonstrate basic knowledge and understanding of elementary concepts of plant and livestock farming according to ecological principles, problems, advantages, disadvantages and conditions for the development of this form of agriculture in BiH and in the world.

16. Learning outcomes:

After successfully passing the course, the student will be able to:
- describe the characteristics, position and importance of ecological agriculture
- point out the benefits of the energy and environmental balance of ecological agriculture over conventional
- recommend forms and argue the benefits of growing crops without applying agrochemicals
- identify the advantages and disadvantages of certain technologies in plant production
- explain the framework guidelines for the standardization and recognition of ecological agriculture products
- present the information, problems and solutions from the domain of ecological agriculture products
- explain the declaration and labeling of ecological products

17. Course content:

Introduction to model structure. Development of ecological agriculture. Directions and terminology in ecological agriculture. Standardization of eco-food. Natural conditions and crop production interventions in ecological agriculture. Place and role of ecological agriculture in mitigating global climate change. Biological-dynamic agriculture. Bio-dynamic preparations and their use. Soil as a basis for ecological production. Soil preparation. Fertilizers and soil fertilization in ecological agriculture. Compost and composting processes in eco-agriculture. Biological fertilizers from worms. Chemical composition and application of fertilizers from worms. Permaculture as a form of alternative agriculture. Crop rotation. Problems related to growing in ecological agriculture. Pest, disease and weed control. Biological-organic farming. Cultivation of agricultural crops. Fruit growing. Viticulture. Medicinal herbs and spice herbs, decorative plants and trees. Cattle breeding. Growing and use of forage crops. Guidelines and laws regulating eco-production.

18. Learning methods:

Lectures, laboratory exercises, field teaching, group and individual consultations. Lectures will be multimedia supported when appropriate, with the expected active participation of students in the discussion. The exercises will be conducted in interactive form, through the practical performance of laboratory experiments. Visits to relevant business organizations will demonstrate the link between theory and practice. Consultations will facilitate and deepen understanding of the subject matter.

19. Assessment methods:

Throughout the course, students are required to attend lectures and exercises on a regular basis, which will be monitored by the subject teacher and associates and, on special forms, keep records. During the semester, the student can be absent from a maximum of three lectures and three exercises, being obliged to bring proof of justification of absence (medical certificate, etc.). In the case of more unexcused absences, the student loses the right to the signature of the teacher.

• TESTS - Two tests throughout the semester. Each test consists of a maximum of 20 short theoretical questions related to the previously processed material and carries 20 points (for a passing grade, one should achieve a minimum of 11 points). Tests are usually conducted after every six weeks of instruction, whereby the subject teacher will announce them to the students at least two weeks before each test.

LABORATORY EXERCISES: the student is obliged to do all laboratory exercises, and based on activity in exercises can achieve a maximum of 25 points (for a passing grade should achieve a minimum of 13 points).

• FINAL PART OF THE EXAM - Students who have collected the minimum required number of points for the pass grade (54 points) by all criteria, have the right on deserved grade or to use the option of additional (verbally or in writing exam) for a higher final grade. The maximum number of points that can be obtained on the final exam is 30. The minimum number of points, which must be reached on the final exam is 18.

All the students who did not meet the conditions in one of the tests or who are not satisfied with the grade, but who have completed all other obligations of the course (have the signature of the subject teacher in the index) take the final exam. The student can not get a final grade if he has not passed both tests.

20. Assessment components:

The final grade is based on the total number of points obtained through pre-requisites and the final exam, according to the quality of the acquired knowledge and skills. It has a maximum of 100 points, according to the following scale:
Regularity of teaching attendance (lectures + exercises): 5 points
Activity in laboratory exercises: 25 points
Tests (theory): 40 points
Final Exam: 30 points

21. Required reading list:

Kisić I (2014). Uvod u ekološku poljoprivredu. Grafički zavod Hrvatske d.d., Zagreb.
Oljača S (2012). Organska poljoprivreda, Zadužbina Andrejević, Beograd.
Znaor D (1996). Ekološka poljoprivreda. Nakladni zavod Globus, Zagreb.

22. Web sources:

23. Applicable starting from the academic year:

2016/2017

24. Adopted in the Faculty/Academy session: