SYLLABUS

1. Course title:

BIOLOGICAL BASIS OF SOIL

2. Code:

3. Cycle of study:

1

4. ECTS credits:

6

5. Type of course:

(•) Mandatory ( ) Elective

6. Prerequisites:

7. Class restrictions:

8. Duration / semester:

1 1

9. Weekly contact hours:

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

10. Faculty:

Faculty of Tehnology

11. Department/study program:

Agronomy

12. Lecturer:

Dr. Isat Skenderović associate professor

13. Lecturer's e-mail:

isat.skenderovic@untz.ba

14. Web site:

www.tf.untz.ba

15. Course aims:

To introduce students to the basic groups of animals that live in the soil and contribute to its fertility.
Get to know the basics of their morphology and biology as well as the main factors (abiotic and biotic) affecting the development of the land fauna.
Explain the effect of a man (agricultural practices) structure and number of soil fauna, and the basic steps to preserve biodiversity in the soil.

16. Learning outcomes:

After completion of lectures and laboratory exercises and successfully passing the test and integrated examination (final) students will be able to successfully master the material and understand the biology of the soil, the basic groups of organisms of the soil, and the influence of man on the composition of the fauna of the soil, so they can successfully adapt the knowledge for the following modules.

17. Course content:

Introduction: Introduction to the subject, methods and history of soil biology.
Basic characteristics of soils
- Soil characteristics

Land as living environment of invertebrates
- The creation and development of soil and cave animals
- The differences between overhead and underground fauna of invertebrates
- Diet and ecological traits of some soil and cave beetles (Carabidae and Leiodidae)

Overview of important taxonomic characteristics important to distinguish taxa of invertebrate
- Evaluation of qualitative and meristic properties with representatives of leiodid beetles

Centers of diversity pedo- and cavernicolous fauna in Europe and the world
- Diversity and testing of soil and cave invertebrates

The importance and role of soil fauna in the emerging and developing land
- the systematic review of land invertebrate fauna
- (Platyhelminthes, Gastrotricha, Rotifera, Nematoda, Nemertina)

Mollusca, Annelida, Tardigrada and Onychophora). Arthropoda land
Homoptera and Lepidoptera

18. Learning methods:

Lectures - using video materials - PowerPoint presentation.
Laboratory exercises thematically follow the lectures, and on them, students are introduced to the characteristics of the land fauna.

19. Assessment methods:

Grading:
Prerequisites:
attendance up to 2 points,
Activity of students during lectures and in laboratories up to 4 points and
Colloquium up to 10 points.
Test I (in the sixth week of the semester)up to 15 points;
Test II (in the 12th week of the semester)up to 15 points;
Seminar up to 4 points and
test obligations:
Final exam up to 50 points.
At the request of the student but also with the decision of the teachers, the final examination can be organized as oral examination.
For successful passing of the exam total of 54 points are needed to be achieved.

20. Assessment components:

Obtained number of points	Grade (BiH)	(ECTS grade)
<54.00	5	F
54.00 to 64.00	6	E
65.00 to 74.00	7	D
75.00 to 84.00	8	C
85.00 to 94.00	9	B
95.00 to 100	10	A

21. Required reading list:

1. Ćurčić, S.: Zemljišna fauna beskičmenjaka. Biološki fakultet, Univerzitet u Beogradu, 2011.
2. Ćurčić, S., Nikolić, Z, Mladenović, A.: Zemljišna fauna beskičmenjaka (praktikum sa random sveskom). Biološki fakultet, Univerzitet u Beogradu, 2011.

22. Web sources:

23. Applicable starting from the academic year:

2016/17

24. Adopted in the Faculty/Academy session: