Svetošimunska cesta 25, 10000 Zagreb Phone: +385 (0)1 2393 777

E-mail: <u>dekanat@agr.hr</u> Web: www.agr.unizg.hr

Basics of Agricultural Zoology (152067)

Course coordinator

Prof. Tea Tomljanović, PhD

Course description

Definition and development of zoology and agricultural zoology. Principles of general and systematic zoology. Etiology. The basic ecological concepts. Zoogeography. Paleontology. Evolution. Endemic species and the protection of animals. Systematic and biology of animals. Overview of the animal kingdom, with special emphasis on those relevant to agronomy. Microscopy. Working with preparations in practicum. Seminars. Field work in nature and Zagreb zoo.

ECTS: 3.00	Grading
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English language: L1 Sufficient (2): 74-79%

Good (3): 80-87%
E-learning: **L1**Very good (4): 88-95%

Excellent (5): >96%

Teaching hours: 30

Lectures: 18
Practicum: 8
Seminar: 4

Lecturer

• Prof. Tomislav Treer. PhD. Professor Emeritus

Associate teacher for exercises

- Prof. Marina Piria, PhD
- Assoc. Prof. Daniel Matulić, PhD

Associate teacher for seminars

• Prof. Marina Piria. PhD

Type of course

• Undergraduate studies / <u>BS Courses taught in English</u> (Elective course, 1 semester, 1 year)

General competencies

At the end of this course students will be able to manage good recognition of animal taxa in order to successfully work with the animals and study their role in human life.

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Types of instruction

- Lectures
 - the lessons will be interpreted certain chapters with many examples of practice and numerous projection pictures
- Laboratory practice/exercises
 - Work on the section of different animal species
- Practicum
 - work on a collection of animals that are found in the Department of fisheries, beekeeping, game management and special zoology
- · Field work
 - sampling different species in streams and rivers. Visits to museums, the zoo and other natural science institutions
- Seminars
 - $individual\ work\ of\ students\ at\ especially\ interesting\ animal\ species\ for\ him\ with\ the\ expert\ help\ of\ mentors$

Learning outcomes

Learning outcome	Evaluation methods
Identify and nominate important animal taxons	colloquium, midterm exam
To understand the significance of evolution and evidence of it	oral exam
To demonstrate the basics of field and laboratory work with animals	oral exam
Systematized animal species in the appropriate category and understand its role in agriculture	midterm exam

Working methods

Teachers' obligations

Classes according to the schedule and within the planned number of hours. Keeping records of the presence of students in classes, student success and achievements. Recommendations of textbooks, manuals and other forms of information that are available to students. Maintenance exams for students according to the schedule prescribed in the examination terms. Maintenance consultation with students to overcome the study program. Organizing field work for students. Mentoring students in the preparation of the final work.

Students' obligations

Solve the teaching and exam prerequisites. Attend the established curriculum.

Methods of grading

Evaluation elements	Maximum points or Share in evaluation	Grade rating scale	Grade	Direct teaching hours	Total number of average student workload	ECTS
midterm exam	44	<74 % 74 % 80 % 88 % 96 %	Insufficient (1) Sufficient (2) Good (3) Very good (4) Excellent (5)	12	160	1.3





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Evaluation elements	Maximum points or Share in evaluation	Grade rating scale	Grade	Direct teaching hours	Total number of average student workload	ECTS
oral exam	12	<74 % 74 % 80 % 88 % 96 %	Insufficient (1) Sufficient (2) Good (3) Very good (4) Excellent (5)	6	10	0.4
midterm exam	44	74 %		12	160	1.3

Evaluation elements	Description	Deadline	Recoupment
midterm exam	Chordonia, Anamnia, Reptilia, Aves, Mammalia	From the ninth week until the end of classes	During examination periods
oral exam	Ecology. Basic ecological terms. Zoogeography. Paleontology. Evolution. Endemic species and animal protection		During examination periods
colloquium	Identify and nominate important animal taxons	By the end of the classes	During examination periods

Weekly class schedule

- 1. General and systematic zoology L Definition and importance of zoology and agricultural zoology. Basic concepts of general zoology. The principles of classification of animals.
- 2. Selected terms of general zoology I L Tomljanović Etiology. The basic ecological terms. Zoogeography
- 3. Selected terms of general zoology II L Paleontology. Evolution. Endemic species and the protection of animals
- 4. Taxonomy I L Protozoa, Parazoa
- 5. Taxonomy II L Ameria
- 6. Taxonomy III L Polymeria, Oligomeria
- 7. Taxonomy IV L Anamnia
- 8. Taxonomy V L Reptilia, Aves.
- 9. Taxonomy VI L Mammalia
- 10. Practicum P Work with preparats in practicum
- 11. Laboratory work Lab Microscopy
- 12. Field sampling I F Field work in nature
- 13. Field sampling II F Field work in Zagreb zoo.
- 14. Seminar S Individual consultation for seminar work
- 15. Exam

Obligatory literature

- 1. Treer T., Tucak Z. (2004): Agrarna zoologija. Školska knjiga, Zagreb.
- 2. Treer T., Odak T., Piria M. (2001): Tablice za prepoznavanje važnijih taksona životinja. Agronomski fakultet, Zagreb.



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Recommended literature

- 1. Oštrec Lj. (1998): Zoologija. Zrinski, Čakovec.
- 2. Matoničkin I., Erben R. (2004): Opća zoologija. Školska knjiga, Zagreb.
- 3. Dorit R. L., Walker W. F., Barnes R. D. (1991): Zoology. Saunders College Publishing, Philadelphia.
- 4. Garms H., Borm L. (1981): Fauna Evrope. Mladinska knjiga, Ljubljana
- 5. Matoničkin I., Habdija I., Primc-Habdija B. (1998): Beskralješnjaci I & Espanderija I., Školska knjiga, Zagreb.

Similar course at related universities

- Agricultural Zoology, Mendel University in Brno, Czech Republic
- Zoologie, BOKU, Wien, Austria
- · Zoology, University of Hohenheim, Germany