



## ANIMAL BIOLOGY (YEAR I)

### 1. Data about the program

1.1 Higher education institution	University of Agricultural Sciences and Veterinary Medicine from Iaşi
1.2 Faculty	Veterinary Medicine
1.3. Departmnet	Clinics
1.4 Field of study	Veterinary Medicine
1.5 The study cycle	I- License
1.6 Study program	Veterinary Medicine

### 2. Subject status

2.1 The name of the discipline	Animal Biology						
2.2 Subject titular head	Professor Liviu Miron, PhD						
2.3 Subject seminar activities head	Professor Liviu Miron, PhD, Lecturer Larisa Ivănescu PhD.						
2.4 Year of study	I	2.5 Semester	1	2.6 Forms of evaluation	summative	2.7 Discipline regime	Ob

### 3. Estimated total time (hours per semester of teaching activities)

3.1 Number of hours per week	4	from which: 3.2	2	3.3 seminar / laboratory	2
3.4 Total hours in the curriculum	56	from which: 3.5	28	3.6 seminar / laboratory	28
Distribution of time fund					hours
Study by textbook, course support, bibliography and notes					40
Additional documentation in the library, on specialized electronic platforms and in the field					8
Seminar / laboratory preparation, homework, essays, portfolios and essays					8
Tutulary					2
Exams					2
Other activities					4
3.7 Total individual study hours	64				
3.9 Total hours per semester	120				
3.10 Number of credits	4				

### 4. Preconditions (where applicable)

4.1 of curriculum	Biological sciences high school level
4.2 of skills	Biological sciences high school level

### 5. Conditions (where applicable)

5.1. of the course	Students will present themselves at lectures and in the laboratory with their mobile phones closed. It is forbidden to use mobile phones during the course and for students to leave the classroom in order to take personal phone calls; Delay of students in class and laboratory will not be tolerated.
5.2. seminar / laboratory	In the laboratory the students will wear protective equipment, respectively robe. Students will learn to examine microscopic preparations under laboratory microscopes.

### 6. Specific skills acquired

Professional skills	Learning the branch of zoology, the most important groups of invertebrate and vertebrate animals. At the end of the course and practical work, the student will have basic knowledge on the evolution of animals, their taxonomy, general characteristics, morphology, internal structure of the animals in the studied groups, their ecological relationships and the sanitary-veterinary importance of the animal groups.
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<b>Transversal skills</b>	<p>Teamwork, oral and written communication skills in English, use of information and communication technology, problem solving and decision making, recognition and respect for diversity and multiculturalism, learning autonomy, initiative and entrepreneurship, openness to lifelong learning, respecting and developing the values of professional ethics and deontology.</p> <p>Documentation in English to identify new knowledge in the field, for the purpose of professional and personal development, through continuous training.</p> <p>Responsible execution of all tasks and design and presentation of complex projects in the field of veterinary medicine. Participate in scientific and professional development projects, compatible with the requirements of integration into the European market.</p>
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### 7. Discipline objectives (based on the grid of specific skills acquired)

7.1 The general objective of the discipline	The objective of the course is to go through the branch of science in zoology, the most important groups of invertebrate and vertebrate animals. At the end of the course and practical work, the student will have basic knowledge on the evolution of animals, their taxonomy, general characteristics, morphology, internal structure of the animals in the studied groups, their ecological relationships and the sanitary-veterinary importance of the animal groups.
7.2 Specific objectives	<ul style="list-style-type: none"> <li>- Introducing students to the knowledge of the most important animal groups.</li> <li>- Analysis of their taxonomy.</li> <li>- Analysis of general characters, morphology and internal structure of animals.</li> </ul>

### 8. Contents

8.1 Course	Teaching methods	Observations
Zoological classification;	Power point presentation, interactive (case studies) and lectures.	1 lecture
Protozoa;		1 lecture
Diploblastic metazoans;		4 lecture
Acoelomates triploblastic metazoans; Protostomian;		4 lecture
Coelomates triploblastic metazoans. Deuterostomian;		1 lecture
Vertebrates;		2 lecture
Mammals;		1 lecture

8.2 Seminar / lab	Teaching methods	Observations
Determinations of biological material, microscopy, experiments; computer simulations.	Use of drawings, microscope, insectar, extemporaneous preparations, preserved preparations macroscopic or microscopic, displacements at the Museum of Sciences of nature	
Course / laboratory bibliography		
1.MIRON Liviu, Manuela MIRON, 2007, Biologie Animală. Ed, Performantica Iasi, 193 p.		
2.MILLER A. S., 2007, Zoology, 7 th Ed., McGraw Hill Ed, Higher Education;		
3.RAVEN P.H. and G.B. JOHNSON, 1999, Biology		
4. Stephen A. Miller, John P. Harley, 2018-Zoology, 11th Edition, 640 pages.		

### 9. Corroborating the contents of the discipline with the expectations of the representatives of the epistemic community, professional associations and representative employers in the field related to the program

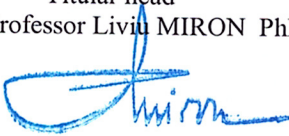
In order to improve the contents, the choice of teaching / learning methods for the holders of the discipline were held the following meetings / participations: with members of the General Association of Romanian Veterinarians or of the Romanian College of Veterinarians, European professional training programs (POSDRU); as well as with other teachers in the field, tenured in other counterpart higher education institutions in the country and in the European Union, including through Erasmus mobility. The meetings aimed at identifying the needs and expectations of employers in the field and correlating them with other similar programs within other higher education institutions in Europe, the veterinary profession being regulated in Europe by specific regulations.



**10. Final evaluation**

Forms of evaluation	10.1 Evaluation criterias	10.2 Modalities of evaluation	10.3 Percentage of final grade
10.4 Course	Knowledge of the most important groups of invertebrates and vertebrates knowledge about animal evolution, taxonomy, general characteristics, morphology, specific to the groups of animals studied.	Exam- written	<b>60</b>
10.5 Seminar / lab	Use of instruments and devices specific to the discipline for the observation and classification of different groups of invertebrates or vertebrates, based on their macroscopic or microscopic morphological aspects.	Assessment of the activity during the year: written/oral	<b>40</b>
10.6 Minimum performance standard - basic knowledge on the general characteristics, taxonomy and morphology of the vertebrate and invertebrate animal species studied.			

Titular head  
Professor Liviu MIRON PhD



Seminar activities head  
Professor Liviu MIRON PhD

Lecturer Larisa IVĂNESCU PhD



Head of departament

Professor Vasile VULPE PhD

