

Vertebrates taxonomy (IInd Year of study, IInd Semester)

Credit value (ECTS) 5

Course category

Domain (Imposed)

Course holder:

Assist. Prof. Dr. Florentina Manuela Miron

Discipline objectives (course and practical works)

Study of the biology and taxa of vertebrates organisms.

Special attention is given to the general characters, morphology, internal organization and taxonomy of main groups of animals: Gnathostomata Vertebrates [Pisces & Tetrapoda: Amphibia, Reptilia, Aves, Mammalia].

Practical works seek to familiarize students with technical work in animal biology laboratories and knowledge of general notions relating to taxonomy, morphology, physiology and reproductive particularities of the main groups of animal biology with implications on the biomanipulating of the environmental factors in the purpose of obtaining the natural reefs like supplementary trophical resources, from aquatic organisms.

Contents (syllabus)

Course (chapters/subchapters)
Chordata: Cephalocordata. Urocordata. Vertebrata: General Characters. Clasification.
Pisces. History of the fishes. General characters. The tegument. Nervous system and sense organs. Digestiv apparatus. Swimm blader. Circulator system. The respiration. Urogenital apparatus. Clasification.
Amphibians. History of the amphibians. Origin of Amphibians. General characters. The tegument. The skeleton. Nervous system and the sense organs. Digestiv apparatus. Circulator system. Respirator system. Urogenital apparatus. Clasification. Reptiles. Key characteristic of reptiles. The rise and fall of dominant reptile group. Today's reptiles. Turtles. Liyards and snakes. Tuataras. Crocodiles. General characters. The tegument. The skeleton. Nervous system and the sense organs. Digestiv apparatus. Circulator system. Respirator system. Urogenital apparatus. Clasification
Birds. Key characteristic of birds. History of the birds. Birds today. General characters. The tegument. The skeleton. Nervous system and the sense organs. Digestiv apparatus. Circulator system. Respirator system. Urogenital apparatus. Clasification
Mammals. Key mammalian characteristics. The lactation. The tegument. Nervous system and the sense organs. Digestiv apparatus. Circulator system. Respirator system. Urogenital apparatus. Adaptare la moduri de locomoție. Clasificare.

Practical works
Fishes. Typs of scales. General organization. Gristly fish examples. Bony fish important adaptations. Clupeiformes, Esociformes, Cypriniformes, Perciformes.
Amphibians. Structure, Clasification, bio-ecology.

Reptiles. Structure, Clasification, bio-ecology.
Birds: Key characteristic: feathers, flight skeleton adaptation to flight.
Birds: Clasification, bio-ecology
Mammals. Origin, Characteristic, Typs of dentition. Locomotion typs. General clasification.

Bibliography

1. L. Miron, Manuela Miron, 2007, "Biologie animală", Ed. Performantica Iași, 193 p.
2. Miller Harley, 2007 (seventh edition), "Zoology", Ed. McGraw- Hill International Edition, 588 p.
3. Pisciă Constantin et al., 1983, "Zoologia Nevertebratelor" Ed. Didactică și Pedagogică București 378 p.
4. P. Raven & G. Johnson, 2000, "Biology", Ed. WCB McGraw-Hill, Boston 1285 p.
5. Winfried Ahne et al., 2000, "Zoologie" Lehrbuch für Studierende der Veterinärmedizin und Agrarwissenschaften, Ed. Schattauer, 342 p.
6. Willis Johnson, Louis Delaney, Eliot Williams, Thomas Cole, 1977, "Principles of Zoology", Ed. Holt, Rinehart and Winston, 747 p.

Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Exam	Oral examination	60%
Appreciation of the activity during the semester	Oral assessment during the semester, verification tests and final laboratory colloquium.	40%

Contact

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