

**FACULTATEA DE ȘTIINȚE
DEPARTAMENTUL DE BIOLOGIE**

Topics for the didactic/scientific lecture

**The position of *Professor*, number 1 in the Staff Register of the Faculty of
Science, Department of Biology**

1. Phylum Ciliophora, morpho-physiological characterisation, reproduction, environment of life, classification. Characterisation, classification, species and biology of Class Ciliata.
2. Division Eumetazoa, definition, subdivision Coelenterata (Radiata, Diploblasta), definition. Phylum Cnidaria, histological and morphological characterisation of the polyp and medusa, biology, life cycles. Classification.
3. Subdivision Triploblasta (Bilateria), definition and origin. Characterisation of Acoelomata, Pseudocoelomata and Eucoelomata. Phylum Plathelmintha, characterisation morphology, structure, classification.
4. Group Pseudocoelomata, general features, ecology, classification. Phylum Nematoda, characterisation, classification.
5. Group Eucoelomata, Phylum Annelida, morpho-anatomical characterisation, biology, ecology, classification.
6. Phylum Mollusca, general characterisation, structure, anatomy, reproduction, biology and ecology of the group, classification.
7. Phylum Arthropoda, general characterisation. Classification of the Arthropoda, Subphylum Chelicerata (Arahnomorpha), classification.
8. Subphylum Mandibulata, characterisation, classification. Class Crustacea, morpho-anatomic characterisation, reproduction, ecology, classification.
9. Systemic conception in ecology. Biological systems: general theory of systems, biological systems and their characteristics.
10. Hierarchy of biological systems (individual level, populational or species level, biocenosis level, biosphere level – short characterisation).
11. Light as an ecological factor, the influence of light on living organisms.
12. Water as an ecological factor, the influence of water on living organisms.
13. Pressure as an ecological factor, the influence of pressure on living organisms.
14. Limiting factors of the environment: the tolerance law, the minimum law, the law of interaction between limiting factors.

Bibliography

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Department Director
Conf.dr. Diana Cupsa

