Study Program: Biology

Type and level of studies: Bachelor studies

Course name: Zooecology and zoogeography

Lecturer: Živić V. Nebojša

Status: Compulsory

ECTS: 6

Attendance Prerequisites: Comparative anatomy of chordates

Course aims

Acquiring basic knowledge in autecology, demecology and zoocenology. Field research in animal ecology, linking ecology to zoogeography.

Course outcome

Ability to identify and study animal-environment interactions; field research within the domain of ecology. Linking ecology with animal protection.

Course content

Theoretical part:

The subject of study and classification of ecology, its origin and development. History of animal ecology. Relationship with other biological sciences. Levels of ecological research. Ecological disciplines. Environmental factors and their classification. Autecology- the impact of environmental factors and ecological valence. Life form. Ecological niche. Climate factors. Climate regime, phenological phenomena and the dormant phase. Environmental chemistry. Edaphic factors. Biotic factors. Demecology – the concept, formal and functional elements of population. Population theories. Ethological capabilities. Population growth and mobility factors. Spatial relations. Synecology-Biocenosis, trophic relations. Periodism, Ecosystem. Ecosystem metabolism and organic productivity. Ecosystem succession. Man and the biosphere. Climax. Marine and freshwater ecosystems. Terrestrial biomes. Species distribution area. Animal dispersal. The relationship between animal ecology and zoogeography and their mutual dependency. Ecology and environmental protection.

Practical part:

Experimental and statistical research methods in ecology. Biotic and ecological niche. Life form. Population growth of Paramecium in limited conditions. The effect of environmental factors on population dynamics and other exercises.

Literature

1. Станковић, С. (1961): Екологија животиња. Завод за издавање уџбеника, Београд.

2. Begon, M., Harper, J.L., Townsend C.R (1996): Ecology. Third edition. Blackwell Science. 1068pp.

4. Odum,E.P.1974):Fundamentals of Ecology. Third Edition. W.B. Saunders company. Philadelphia, London, Toronto.

5. Лопатин, И. (1995): Зоогеографија; превод са руског С. Пешић. Зим-Пром, Крагујевац.

6. Матвејев, С. Д., Пунцер, И. J. (1989): Карта биома - Предели Југославије и њихова заштита. Природњачки музеј у Београду; Посебна издања.

7. Паповић, Р., Шапкарев, Ј. (1993): Анимална Екологија. Универзитет у Приштини.

Number of active classes					Other classes:
Lectures: 2	Practical classes: 0		forms of	Students'	
		teachi	ng: 2	research work	
Teaching methods					
Theoretical interactive classes, presentations, field trips, fieldwork, term papers.					
Assessment (maximum 100 points)					
Course assignments		points	Final exa	m	points
tests during practical classes		15-30	written ex	am	
tests during lectures		15-40	oral exam	l	30-70
Total					