Code: 03-1-02

SPELEOBIOLOGY

ECTS: 10

Course coordinator: Prof. Dr. Boris Sket

Lecturers: Prof. Dr. Boris Sket, Assist. Prof. Dr. Rudi Verovnik, Prof. Dr. Boris Bulog, Prof. Dr. Tone Novak

No. of hours: 250
Lectures: 20
Seminar: 40
Lab. work: /
Other: 190

2. Entry requirements:
Examination passed from systematic zoology of invertebrates (or similar subject in former university studies or level 2 of Bologna studies).

3. Objectives of the course and intended learning outcomes:
Objectives: Acquaintance with peculiarities of subterranean habitats and their importance for human populations (drinking water, tourism); importance of endemism for biodiversity; extraordinarily high subterranean biodiversity in Dinarides and their vicinity (phylogenetic and biogeographic aspects); accordance between population needs and conservation.
Results: It allows the candidate to understand ecology and biodiversity in relation to the subterranean environment; it gives him basic knowledge for the sustainable use of the latter.

4. Syllabus outline:
The course contains the theoretical foundations for classification of the subterranean organisms and their general characteristics of them. Trogloomorphic and functional morphological adaptation to the subterranean environment will be explained. The classification of subterranean habitats and their specifics will be explained.
Particular emphasis will be given to recent investigations of species distribution, endemism, polytop immigration and evolution of subterranean biota.
The ecology of interstitial waters, their usability and threats to their quality will be presented, as will be the groundwaters of karst voids ('cave waters'). The ecological particularities of sinking streams will be presented as a source of support for understanding underground colonization, together with the ecological particularities of terrestrial subterranean habitats and their fauna.
Emphasis will be given to Dinaric and some certain other particularly rich subterranean faunas. Presented will also be subterranean biodiversity and its conservational importance.

5. Literature (in the case of books and monographs, study sources are only selected chapters from them):
- Selected papers of lecturers.

6. Teaching methods:
Individual study of literature, consultations, joint research project, lectures.

7. Assessment methods:
Seminar exercises, part of the doctoral thesis.

8. References:

Bulog Boris

Novak Tone

Sket Boris:

Verovnik Rudi