

Study program: Biology			
Type and level of studies: Doctoral academic studies (DAS)			
Course unit: B319 Biology and protection of chosen invertebrate taxon			
Teacher in charge: Prof. dr. Snežana B. Pešić, Asst. Prof. dr. Filip Vukajlović			
Language of instruction: English			
ECTS: 12			
Prerequisites: /			
Semester: Winter			
Course unit objective Acquiring more precise, more comprehensive and contemporary knowledge in the biology of the chosen taxon, whereby special emphasis is put on developing awareness of further improvement through logical and critical thinking and the ultimate ethical attitude towards the problem being solved.			
Learning outcomes of Course unit A trained expert capable of independently applying the acquired professional and practical knowledge in the biology of the chosen taxon, considering the accuracy, precision and real possibility in solving the protection problem.			
Course unit contents <i>Theoretical classes:</i> Depending on the student's interest and the topic of the chosen narrow scientific discipline of the PhD thesis, the candidate opts for the taxon. Overview of the current systematics of the selected taxon. Ecological niche and life form. Ecological factors and the chosen taxon: relation to temperature, light, humidity, and other abiotic factors. Trophic factors. Biotic factors: Relationships within the species (individuals' number, spatial distribution, age and gender structure and health status of the population, individual and familiar behavior, birth rate, mortality, population dynamics in space and time); Relationships with other taxa in zoocenosis, biocenosis and ecosystem(s). The role and importance of chosen taxon in the movement of matter and energy. Areal, distribution centers and origin of chosen taxon. Displacement options. Periodic migration (depending on taxon selection). Anthropogenic influences. Selected taxon and bioindication. Needs and possibilities of protection of the selected taxon. Sampling techniques. Estimates of wealth of taxon.			
Literature –Bardget R. (2008): The Biology of Soil – A community and Ecosystem Approach. Oxford University Press. –Chapman JL & Reiss MJ. (2003): Ecology – Principles and Applications. Second edition. Cambridge University Press. –Danchin É., Giraldeau L-A., Cézilly F. (2008): Behavioural ecology. Oxford University Press. –Davies N.B., Krebs J.R., West S.A. (2012): An introduction to behavioural ecology. Fourth edition. WileyBlackwell. –Dobson M & Frid C. (2009): Ecology of Aquatic Systems. 2nd edition. Oxford University Press. –Pešić S. (2011): The Fundamentals of Ecology. Faculty of Natural Sciences and Mathematics, Kragujevac. (in Serbian) –Southwood TRE, Henderson PA. (2004): Ecological methods. 4th edition Blackwell Science. –Red Books –...			
Number of active teaching hours			Other classes:
Lectures: 90	Practice:	Other forms of classes:	
Teaching methods Dialogs, presentations, seminar work (s), use of the Internet and computer programs for statistical research. Publication of results at domestic and foreign scientific meetings, or in journals.			
Examination methods (maximum 100 points)			
Exam prerequisites	No. of points	Final exam	No. of points
Activity during the lectures	10	Written examination	-
Seminar paper	50	Oral examination	40
Grading system			
Grade	No. of points	Description	
10	>= 91	Excellent	
9	81-90	Exceptionally good	
8	71-80	Very good	
7	61-70	Good	
6	51-60	Passing	
5	<=50	Failing	