

Study program: BIOLOGY			
Type and level of studies: Undergraduate studies			
Course unit: B117 - Plant Ecology			
Teacher in charge: Milan S. Stanković			
Language of instruction: English			
ECTS: 6			
Prerequisites: /			
Semester: Summer			
Course unit objective			
Introduction to basic concepts, principles and methodological approach in plant ecology.			
Learning outcomes of Course unit			
The acquired knowledge and skills within the ecology of plants with potential applications in scientific research and practice.			
Course unit contents			
<i>Theoretical classes:</i>			
I Autecology (Idioecology): Basic concepts and introduction to plant ecology. Ecological factors. Adaptations. Life forms and their differentiation. Light as an ecological factor. Temperature as an ecological factor. Water and humidity as ecological factors. Differentiation of ecological groups of plants in relation to water regime of habitats. Air and wind as ecological factors. Soil as a complex of ecological factors. Genesis and soil classification. Differentiation of edaphic ecological groups and their indicative significance: serpentinophytes, metallophytes, nitrophilic plants, halophytes, oxylophytes and psammophytes. Biotic factors.			
II Phytocoenology (Phytosynecology): Basic concepts of biocenology. Phytocoenology and concept of phytocoenosis. Structure and dynamics of plant communities and vegetation. Classification of plant communities. The importance of the complexity of environmental factors. The influence of altitude on the distribution of vegetation.			
III Overview of vegetation types: Tropical rain forests. Vegetation of the mangrove. Tropical deciduous forests and bushy communities. Savanna. Sclerophyllous evergreen vegetation. Desert vegetation. Steppe vegetation. Vegetation of temperate deciduous forests of moderate zone. Coniferous forests of the Northern Hemisphere. Vegetation of the cold zone. Tundra and cold deserts. Highland vegetation. Meadow vegetation. Wetland vegetation. Basic of biogeography.			
<i>Practical classes:</i>			
Laboratory and field exercises according to the concept of theoretical teaching. Work with herbarium, mineralogical and pedological collections, microscopic preparations, devices for measuring microclimate parameters. Learning the basic principles and methodological approaches in the collection, processing and interpretation of data on flora and vegetation.			
Literature			
Schulze E.D, Beck E, Müller-Hohenstein K. (2009): <i>Plant Ecology</i> . Springer, Berlin/Heidelberg.			
Archibold O. W. (1995): <i>Ecology of World Vegetation</i> . Springer Netherlands.			
Rivas Martínez, 2015. <i>Worldwide Bioclimatic Classification System 1996-2015</i> . S. Rivas-Martínez & S. Rivas-Sáenz. Phytosociological Research Center, Spain. http://www.globalbioclimatics.org			
Number of active teaching hours			Other classes: /
Lectures: 30	Practice: 30	Other forms of classes:	Independent work:
Teaching methods			
Interactive teaching. Methods of individual work. Verbal-textual teaching methodological approach.			
Examination methods (maximum 100 points)			
Exam prerequisites	No. of points	Final exam	No. of points
Practical classes		Written examination	15
Tests	10	Oral examination	60
Homework	/	Other	
Seminars	15		
Project	/		
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	