

Study program: ECOLOGY			
Type and level of studies: Undergraduate studies			
Course unit: E116 – Plant Ecology and Geography			
Teacher in charge: Milan S. Stanković			
Language of instruction: English			
ECTS: 7			
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 in the context of ecology and geography 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. Differentiation of ecological groups of plants in relation to ecological factors. Soil as a complex of ecological factors. 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. Basic principles of spreading vegetation. 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. Vegetation of water basins.			
IV Plant geography: Endemics and relicts. Basic concepts of historical phytogeography. History of the plant life in the Paleozoic. History of the plant world in the Mesozoic. History of the plant world in the Cenozoic. A special review of the history of flora and vegetation during the Ice Age. Florist regions and their division.			
<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: 45	Practice: 45	Other forms of classes:	Independent work:
Teaching methods			
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	10
Tests	15	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	