Course Unit Descriptor

Study Programme: Landscape Architecture	
Course Unit Title: Environment and Landscape Ecology	
Course Unit Code: 19.PEJ023	
Name of Lecturer(s): Milena Lakićević	
Type and Level of Studies: Bachelor studies	
Course Status (compulsory/elective): compulsory	
Semester (winter/summer): summer	
Language of instruction: Serbian/English	
Mode of course unit delivery (face-to-face/distance learning): face-to-face	
Number of ECTS Allocated: 4	
Prerequisites: none	

Course Aims: Introduction to the basic principles of environmental protection in urban and rural environments, as well as acquiring knowledge about the management of landscapes and protected natural assets, using modern computer programs.

Learning Outcomes:
Students acquire the knowledge and skills needed to solve problems in the field of landscape ecology and environmental protection, using the R program, as well as software that support the application of multi-criteria analysis methods (Visual PROMETHEE, Criterion Decision Plus, etc.)

Syllabus:
Theory
Lectures include presentations dealing with basic terminology in the field of landscape ecology, classification and management objectives of protected natural assets according to international and national regulations, as well as planning the development of green systems in cities in accordance with environmental standards. Topics are also considered: biological spectrum of flora, biodiversity indices, ecological factors, distribution of plant species, loss of plant species and protection of plant species, and for each of the topics it is planned to solve several tasks in the program R.
Practice
Exercises consist of a practical part and a visit of institutions (Provincial Institute for Nature Protection, Eco Center Radulovacki, etc.). The practical part includes work in modern computer programs that are used to support decision-making in landscape management. Special attention is dedicated to learning the basics of work in the program R for the problems of numerical data processing, conducting statistical tests and creating maps. In addition, students are introduced to working in the Visual PROMETHEE and Criterion Decision Plus programs used to evaluate protected asset management plans.

Required Reading: Lakicevic, M., Povak, N., Reynolds, K.M. (2020): Introduction to R for Terrestrial Ecology. Springer Nature

Weekly Contact Hours:	**Lectures:** 30		**Practical work:** 45

Teaching Methods: Lectures, practical exercises (computer)

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Active class participation	10	written exam	30
Practical work	10	oral exam	30
Preliminary exam(s)	10	…….	
Seminar(s)	10		

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.