Study Programme: MSc. in Ecology

Degree level: Master degree

Course Title: CONSERVATION AND RESTORATION OF TERRESTRIAL ECOSYSTEMS

Professor: Ante Vujić, PhD, Dubravka Milić, PhD

Required/Elective Course: Elective

Number of ECTS: 8
Prerequisites: -

Course Objective:

The goal of the course is to introduce students to the theory and practice of preservation and restoration of terrestrial ecosystems. In the system of environmental protection one of the important segments is the management of processes in natural habitats. Objectives of the course include learning about the basis of theoretical modeling of ecosystems and landscape management processes. An important part of the course relates to the treatment of degraded habitats and basic settings of restauration ecology and restoration of terrestrial ecosystems. Special attention is directed toward the concept of designing habitats, risk analysis and selection of priority habitats for conservation and restoration.

Course Outcome:

Throughout this course students will learn about the practical examples of conservation and restoration of habitats and landscapes in the world, but also in our country and will be qualified for inclusion in projects related to the matter.

Course Content:

Theoretical part

Conservation and management of ecosystems. Conservation of habitats and landscapes. Preserving habitats - the basic principles. Landscape management processes. Modeling of ecosystems. Management of succession. Management of degraded habitats. Types of restoration, criteria and valorisation. Protocols and procedures in ecological restoration. Restauration of terrestrial ecosystems. The importance of genetic diversity in restoration.

Practical part

Problems of conservation of terrestrial ecosystems. Identification of priorities in conservation of ecosystems. Design of habitats. Risk analysis. Conservation planning. Examples of the strategies of conservation of selected groups of habitats. Practical examples of degradation of habitats and their restoration.

Reading List:

- 1. Sutherland, W.J., Hill, D.A. (1995): Managing Habitats for Conservation. Cambridge University Press, Cambridge.
- 2. Sutherland, W.J. (2000): The Conservation Handbook: Techniques in Research, Management and Policy. Blackwell Science.
- 3. Van Andel, J., Aronson, J. (2005): Restoration Ecology. The New Frontier. Blackwell Publishing.

Total hours:					
Lectures: 2	Practicals: 2	Other:	Student research work:		
			5		

Methods of instruction:

Video presentation, projects production and defense. Field training: visiting the areas that have activities related to conservation and restoration

Assessment (maximum number of points 100)						
Requirements	points	Final exam	points			
Active participation in lectures	10	Practical exam	40			
Active participation in practicals	20	Oral exam	30			
Test(s) or						
Pre-exam testing						
Remark:						