

Study Programme : MSc in Biology			
Degree level: Master degree			
Course Title: Structural Plant Adaptations			
Professor: dr Jadranka Lukovic			
Required/Elective Course: Elective Course			
Number of ECTS: 8			
Prerequisites: -			
Course Objective: Getting knowledge about different complex mechanisms of plant adaptations to specific habitat conditions, as well as about structural changes induced by exogenous factors			
Course Outcome: After finishing this course students should be able to recognize and understand different types of plant adaptations and the effects of exogenous factors on the structure of plant organs.			
Course Content:			
<i>Theoretical part</i> – Structural adaptations of plants to specific habitat conditions. Morphological and anatomical characteristics of plants from aquatic, saline, sand and steppe habitats, as well as of hill, mountain and alpine plants. Morpho-anatomical changes induced by pollutants. Changes in plant structure caused by: air pollution, acid rains, ionizing and UV B radiation, increased concentration of CO ₂ and pesticides.			
<i>Practical part</i> – Student research work is in accordance with students' field of research and the subject of their master thesis.			
Reading List:			
1. Dawson, J., Lucas, R. (2005): The Nature of Plants.Habitats, Challenges, and Adaptations. Timber Press, London			
2. Fhan, A. (1992): Xerophytes, GB, Berlin			
3. Dickison C. W. (2000): Integrative plant anatomy, Harcourt academic press, New York, London			
4. Baas, P., Bauch, J. (1986): The effects of environmental pollution on wood structure and quality. International assoc. of Wood Anatomists, Leiden			
new literature and published papers available on internet			
Total hours:			
Lectures: 2	Practicals:	Other: 2	Student research work: 5
Methods of instruction: lectures, exercises, student research work, consultations			
Assessment (maximum number of points 100)			
Requirements	points	Final exam	points
Active participation in lectures		Test	
Active participation in practicals		Oral exam	70
Colloquia	30		
Pre-exam testing			
Remark:			