

Course Unit Descriptor

<b>Study Programme: Agronomy</b>			
<b>Course Unit Title:</b> Biodiversity of microorganisms			
<b>Course Unit Code:</b> 3DAI1033			
<b>Name of Lecturer(s):</b> Associate Professor Simonida Djuric, Assistant Professor Timea Hajnal – Jafari, Assistant Professor Dragana Stamenov			
<b>Type and Level of Studies:</b> Doctoral studies program - PhD			
<b>Course Status (compulsory/elective):</b> Elective			
<b>Semester (winter/summer):</b> Summer			
<b>Language of instruction:</b> English			
<b>Mode of course unit delivery (face-to-face/distance learning):</b> face-to-face			
<b>Number of ECTS Allocated:</b> 10			
<b>Prerequisites:</b> Master – Faculty of Agriculture; Master – Faculty of Life Science (biology, molecular biology, biology-chemistry), Master -FTS (environmental protection )			
<b>Course Aims:</b> Description of scientific methods used in soil, water and air microbial biodiversity investigation. Description of distribution of certain systematic and physiological groups of microorganisms in different ecosystems.			
<b>Learning Outcomes:</b> Acquiring new knowledge about activity of microorganisms in soil, water and air which can be practically used in plant production.			
Syllabus: <i>Theory</i> Biodiversity of microorganisms in soil, aquatic environment and air. Dispersion of systematic groups of microorganisms in soil, water and air. Dispersion of microorganisms, involved in cycle of biogenic elements, in different ecosystems. Influence of environmental factors on the changes in composition of the microbial community. The impact of agricultural practices on the changes in composition of the microbial community in soil and water. The impact of heavy metals, pesticides and other toxigenic materials contamination on the composition of the microbial community in soil, water and air. <i>Practice</i> None.			
<b>Required Reading:</b> Paul A., Clark F.: Soil microbiology and biochemistry, Academic press, San Diego, California,1996 Prescott, L. M.: Microbiology, 5th edition, McGraw Hill, NY, 2002			
<b>Weekly Contact Hours:</b> 3	<b>Lectures:</b> 3	<b>Practical work:</b> 0	
<b>Teaching Methods:</b> Theoretical and practical instruction is given to the aid of modern technology in the respective classrooms and laboratories.			
<b>Knowledge Assessment (maximum of 100 points):</b>			
<b>Pre-exam obligations</b>	points	<b>Final exam</b>	points
Active class participation		written exam	
Practical work		oral exam	50
Preliminary exam(s)		.....	
Seminar(s)	50		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			

