

Study Program: Biology				
Type and level of studies: Bachelor studies				
<b>Course name: Microbiology</b>				
<b>Lecturer: Kiković D. Dragan</b>				
Status: Compulsory				
ECTS: 7				
Attendance Prerequisites:				
<b>Course aims</b> The aim of the course is to enable students to understand the basic principles of morphology, material, the structure, physiology, reproduction and ecology of microorganisms. Special attention is paid to the biochemical and bioenergetic processes as well as the specifics of the taxonomy of prokaryotes.				
<b>Course outcome</b> The student have grasped the concepts of microbiology as a basis for attending other courses in fundamental and applied microbiology.				
<b>Course content</b> <i>Theoretical part</i> Historical development of microbiology as a science. A summary of the biology of acellular (viruses, prions, viroids) and cellular (bacteria) microorganisms. Bacterial metabolism (diet, growth, reproduction). Classification on the basis of nutrition and bacterial cultivation. Metabolic diversity and bacterial energy metabolism. Bacterial genetics. Bacterial taxonomy. Microbial ecology. Biotechnological applications. <i>Practical part</i> Sampling for microbiological analysis. Antibigram tests. Direct and indirect methods for determining the number of bacteria. Interpretation of results.				
<b>Literature</b> 1. Д. Симић: МИКРОБИОЛОГИЈА, Научна књига, Београд, 1988. 2. Ж. Тешић, М. Тодоровић: "Микробиологија", 1992. 3. М. Говедарица, М. Јарак: "Микробиологија земљишта", 1995. 4. Д. Киковић и М. Никшић: Практикум из микробиологије, 2001.				
<b>Number of active classes</b>				Other classes
Lectures: 2	Practical classes: 0	Other forms of teaching: 2	Students' research work	
<b>Teaching methods</b> Lectures, calculation exercises, laboratory exercises, consulting, term papers, homework, written exam.				
<b>Assessment (maximum 100 points)</b>				
<b>Course assignments</b>	<b>points</b>	<b>Final exam</b>		<b>points</b>
activity during lectures	<b>10</b>	written exam		
practical classes	<b>10</b>	oral exam		<b>60</b>
term test(s)	<b>20</b>	.....		
seminar(s)				
<b>Total</b>	<b>40</b>			<b>60</b>