

<b>Study program:</b> Organic crop and livestock production			
<b>Type and level of study:</b> Bachelor academic studies			
<b>Course Title:</b> BASICS OF BIOLOGY			
<b>Professors:</b> Dr Dejana Panković, full professor			
<b>Status:</b> Compulsory, semester I			
<b>ECTS:</b> 8			
<b>Prerequisite:</b> None			
<b>The goal of the course</b> Enabling students to master basic concepts of different biological disciplines relevant to the ecological agriculture. To enable students to explore and understand material of cells, tissues, organs and organ systems of animals, vertebrate embryology basis, basic principles and the basis of classification of animal ecology, application of appropriate modern teaching methods and contemporary literature			
<b>The outcome of the course</b> Students will be able to apply biological concepts in agro ecological farming. At the end of the course students should demonstrate knowledge and understanding of the morphology of cells, tissues and organs of animals, different levels of organization of animals, the basis of development of vertebrates, the principles of ecology, and understanding of the relationships between organisms and the environment as the basis for the implementation of sustainable forms of animal husbandry, the principles of diversity and classification of animals. The students should be qualified for the following skills: using a light microscope, identifying and describing the cells, tissues and organs of vertebrates, recognition and knowledge of the taxonomy of representative organisms, parasites of domestic animals, effective learning, teamwork, critical thinking, presentation of acquired knowledge, outcome assessment learning, evaluation of the teaching process.			
<b>Syllabus</b> <i>Theoretical study –</i> Morphoanatomical structure of plant cells and organs, plant physiology, molecular biology, the importance of genetic research, ecological concepts and ecological factors, population ecology, development and evolution of ecosystems, the evolutionary mechanisms of mutations, genetic drift, natural and artificial selection, speciation. The morphology of the cells, tissues and organs of animals, different levels of organization of animals, the basis of development of vertebrates, the principles of ecology, understanding of the relationships between organisms and the environment as the basis for the implementation of sustainable forms of animal husbandry, the principles of diversity and classification of knowledge of animals, assessment of learning outcomes, assessment of teaching process. <i>Practical lessons -</i> practical lessons will support theoretical knowledge through experimental and demonstrative exercises and enable students to be able to apply them in specific working conditions.			
<b>Literature</b> Chambbell NA., Reece JB., Taylor MR. & Simon EJ. 2008. Biology. Concepts and Connections. Benjamin Cummings, 783 p. Cain ML., Yoon CK. & Sing-Cundy A. Discover Biology. 2004. WW Notron & Company, New York. 996 p.			
<b>Number of lectures: 6</b>			Other Lessons
Lectures: 3	Practices: 3	Other forms of teaching:	
<b>Teaching methods:</b> Lectures, discussions with students, experimental exercises, preparation and public defense of practical applied work.			
Score (maximum 100 points)			
<b>Pre-commitments</b>	<b>Points</b>	<b>The final exam</b>	<b>Points</b>
Activity during lectures	10	Written exam	
practical lessons	10	Oral examination	30
Preliminary exams	2 x 20		
Seminars	10		
<i>Total</i>	70		30