

<b>Study Programme:</b> Veterinary Medicine			
<b>Course Unit Title:</b> Special methods of research in morphology			
<b>Course Unit Code:</b> 3DVM4I54			
<b>Name of Lecturer(s):</b> Gordana M. Ušćebrka, PhD, Full Professor; Slobodan Z. Stojanović, PhD, Associate Professor			
<b>Type and Level of Studies:</b> Doctoral Academic Studies			
<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> 8			
<b>Prerequisites:</b> Scientific research methods, Biostatistics, Courses of elective blocks 1, 2, 3			
<b>Course Aims:</b> Introduce students to the specifics of scientific research in morphology, the methods used for individual morphological research, processing and presentation of the data			
<b>Learning Outcomes:</b> Students will acquire the necessary knowledge about specific methods for their research in morphology, their use in the laboratory under different experimental conditions and periods of animals life cycles. Special emphasis will be placed on the study of these methodologies in morphology that will be of interest to students writing their PhD thesis and for their further specialized training.			
<b>Syllabus:</b>			
<i>Theory</i> The methods and approaches related to the selection of research methods in morphology, specific types of histochemical staining, immunocytochemical staining, double staining, ultrastructural tests, the use of specific test systems for the quantification in the light microscopy.			
<i>Practice</i> Students will be informed and participated effectively in the laboratory in the performance of certain methods, will be familiar with the ways of presenting the results, focusing on the methodology that is of interest to them for their future scientific research.			
<b>Required Reading:</b>			
1. Junqueira L., Carneiro, J. (2005). Basic histology. Data status, Belgrade.			
2. Ross, M., Kaye, G., Pawlina, W. (2003) Histology with cell and molecular biology. Lippincott Williams & Wilkins, London			
3. Kuehnel, W. (2003) Color atlas of cytology, histology and microscopic anatomy. Thieme, Stuttgart-New York.			
4. Ross, M., Kaye, G., Pawlina, W. (2003) Histology with cell and molecular biology. Lippincott Williams & Wilkins			
5. Selected papers related to course.			
<b>Weekly Contact Hours:</b> 8		<b>Lectures:</b> 4	
		<b>Practical work:</b> 4	
<b>Teaching Methods:</b> The method of oral presentation and discussion. Method of presentations, demonstrations, simulations and illustrations on the board and the application of computers with using the appropriate software. Practical laboratory student works with independent student work on a research microscope.			
<b>Knowledge Assessment (maximum of 100 points):</b>			
<b>Pre-exam obligations</b>	points	<b>Final exam</b>	points
student activity	5	Making of complete scientific work	25
seminar – practical part	20	Oral presentation scientific work results	30
seminar – presenting of results	20		