

Course Unit Descriptor

Study Programme: Veterinary medicine			
Course Unit Title: Relationship between nervous, endocrine and immunological system in physiological and pathophysiological conditions			
Course Unit Code: 3ĐBM1H13			
Name of Lecturer(s): Branislava Belić, Marko Cincović			
Type and Level of Studies: Doctoral studies			
Course Status (compulsory/elective): Elective			
Semester (winter/summer): winter			
Language of instruction: English			
Mode of course unit delivery (face-to-face/distance learning): Face to face			
Number of ECTS Allocated: 6			
Prerequisites: None			
Course Aims: The goal of this course is to familiarize students with the link between the nervous, endocrine and immune systems, as it is the most important team in the process of adaptation of farm animals and susceptibility to disease.			
Learning Outcomes: Upon successful completion of the course, students will be able to, based on immune, endocrine and other biochemical findings, assess the health status of individual animal or entire herd.			
Syllabus: The morphology and physiology of the nervous system; The morphology and physiology of the endocrine system; The morphology and physiology of the immune system; Peripheral hormonal activity - impact on effector cells; The central action of hormones - the influence of CNS; The autonomic nervous system and the immune response; Diffuse neuroendocrine system of different organs; Stress and neuroendocrine immunological correlation; The effects of various hormones hypothalamic-pituitary-gonadal interfaces on the immune response and reproduction Immunology; Neuroendocrine modulation of hematopoiesis; Infection and inflammation - effects of inflammation mediators and products of infection causes the endocrine-immune system; Immune Tolerance and Autoimmunity; Psycho-endokrinoimmunology of ethogram characteristics of animals; Neuroendokrinoimmunology and carcinogenesis; Immunogenetics and propensity to disease			
Required Reading: 1. Milivoj Boranić i sar: Psihoneuroimunologija, Školska knjiga, Zagreb, 2008. 2. Ćirić Olivera i sar.: Neuroendokrinoimunologija, Zavod za udžb. i nast.sr., Beograd, 2000. 3. Đurić S.i sar.: Osnovi neuroendokrinologije, Zavod za udžb. i nast.sr., Beograd, 1991. 4. Originalni i pregledni naučni radovi iz časopisa i zbornika			
Weekly Contact Hours:		Lectures: 45	Practical work: 45
Teaching Methods: Oral presentations using audio-visual techniques, written communication - Seminars; Practical field work and laboratory analysis and case studies			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation	10	oral exam	50
Practical work	10		
Preliminary exam(s)	30	
Seminar(s)			
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			