

Study Programme: ANIMAL PRODUCTION
Course Unit Title: ANIMAL PHYSIOLOGY
Course Unit Code: 19.ANM015
Name of Lecturer(s): Professor Aleksandar Bozic, PhD
Type and Level of Studies: UNDERGRADUATE ACADEMIC STUDIES
Course Status (compulsory/elective): Compulsory
Semester (winter/summer): Winter
Language of instruction: Serbian/English
Mode of course unit delivery (face-to-face/distance learning): Face-to-face
Number of ECTS Allocated: 7
Prerequisites: Animal morphology
<p>Course Aims:</p> <p>Acquiring knowledge about the functioning of individual organs, organic systems and organisms in different types of domestic animals. The proposed forms of teaching provide a clear insight into physiological processes and allow students to understand and correctly interpret different physiological parameters.</p>
<p>Learning Outcomes:</p> <p>Students achieve an average of 75% of pre-exam achievements and exams, which enables them to understand the subject of different disciplines in all branches of animal production</p>
<p>Syllabus:</p> <p><i>Theory</i></p> <p>Introduction and course assignment. Physical and chemical laws in the physiology of cells and tissues. Blood physiology. Lymph and lymphatic organs. Physiology of immune system. Physiology of heart and circulation. Breathing. Enzymes. Physiology of digestion and resorption. Metabolism of organic and inorganic substances. Thermoregulation. Vitamins. Physiology of urogenital tract. Acidobase balance. Physiology of excretion. Endocrine system. Muscle physiology. Physiology of the nervous system. Physiology of the senses. Physiology of reproduction. Specificity of the physiological process of birds and fish.</p> <p><i>Practice</i></p> <p>Introduction. Taking blood samples and preparing for analysis. Determination of erythrocyte count. Determination of number of leukocytes and leukocyte formula. Determination of hemoglobin concentration. Determination of blood groups and coagulation time. Blood pressure measurement. Blood and heart rate observation. Breathing - lung volume, spirometry. Digestion in the mouth. Physiology of ruminants and non-ruminants. Skin physiology. Metabolism. Vitamins. Endocrine System. The kidney physiology. Nerve and muscular physiology. Senses. Physiological parameters in general and comparative physiology of birds and fish.</p>
<p>Required Reading: Sjaastad, Q.V., Hove, K., Sand, O. Physiology of domestic animals. <i>Scandinavian veterinary Press</i> 2003.</p>

Sherwood, Lauralee, Klandorf, H., Yancey, P.H. Animal physiology – from genes to organisms. *Thomson LARC, USA2005.*

Weekly Contact Hours:

Lectures:

Practical work:

Teaching Methods: Lectures and Practical classes, verbal, interactive methods (CD presentations, quizzes), individual and group laboratory work, microscopy. Consultations if needed.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Active class participation	5	written exam	20
Practical work	5	oral exam	30
Preliminary exam(s)	35	
Seminar(s)	5		

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.