Study Programme: ANIMAL PRODUCTION

Course Unit Title: PHYSIOLOGY OF NUTRITION OF DOMESTIC ANIMALS AND GAME

Course Unit Code: 3MST1123

Name of Lecturer(s): Prof. dr Aleksandar Božić

Type and Level of Studies: MASTER ACADEMIC STUDIES

Course Status (compulsory/elective): Elective

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:6

**Prerequisites:none** 

#### **Course Aims:**

Clear understanding of the physiological characteristics of domestic animals and wildlife in part covered by the subject content. Acquiring knowledge for successful acquisition of professional teaching subjects crucial for the development of graduate - master work.

### **Learning Outcomes:**

Students achieve on average 75% of success in completing the pre-examination and exams, which enables them easier to understand professional teaching subjects in the further studies.

### Syllabus:

### Theory

Dynamics and kinetics of enzyme activity, modes of activation and inhibition. Digestion and resorption of food. The functioning of the portal system and lymph in bone, resorption ways. The metabolism of organic nutrients, minerals and water. Modern techniques of physiology in studies of metabolic processes in domestic animals and wildlife. Regulation of metabolic processes and acid-base balance, the importance of the relationship neural and humoral correlations. The kidneys and lungs in maintaining homeostasis. Dependence of intensity of metabolic processes by various factors. Co-enzyme functions of vitamins, able to adapt to the body in starvation conditions. Energy metabolism. Nervous and chemical regulators of metabolic processes. Research methodology in experiments related to finding and interpretation of physiological parameters

### Practice

Physiological parameters in nutritional and metabolic experiments. Primary and secondary analyzes of blood and secretions in the consideration of metabolic events. The goals of contemporary research in physiology and recent developments.

Required Reading: Sjaastad, Q.V., Hove, K., Sand, O :Physiology of domestic animals, Scandinavian veterinary Press. 2003; Sherwood, Lauralee: Human physiology– from cells to sistems Thomson LARC, USA, 2004.; Sherwood, Lauralee, Klandorf, H., Yancey, P.H.: Animal physiology– from genes to organisms. Thomson LARC, USA, 2005

Weekly Contact Hours:4	Lectures:2	Practical work:2
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# **Teaching Methods:**

Verbal, interactive methods (CD presentations, quiz), individual and group laboratory work, microscopy

# Knowledge Assessment (maximum of 100 points):

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

Seminar(s)	30				
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam,					
project presentation, seminars, etc.					