Biotechnical Faculty / LIVESTOCK PRODUCTION / PHYSIOLOGY OF DOMESTIC ANIMALS

Course:	PHYSIOLOGY OF DOMESTIC ANIMALS			
Course ID	**Course status**	**Semester**	**ECTS credits**	**Lessons** (Lessons+Exercises+Laboratory)
4004	Mandatory	3	7	4+2+0
Programs	LIVESTOCK PRODUCTION			
Prerequisites	): attended or passed exam in Anatomy of domestic animals			
Aims	studying and exploring the manifestation of domestic animal´s basic life functions, and the working principles of individual organ systems depending on the environmental condition and the condition of the body			
Learning outcomes	After successfully mastering the course students will be able to: • to demonstrate knowledge (understanding) in the field of functional organization of the animal organism, • knows and can explain the physiology and functioning of individual organ systems, • knows the correlation of individual systems as • explain the basic principles of traffic and exchange of nutrients and other substances in the body			
Lecturer / Teaching assistant	Professor, PhD Aleksandar Bozic; MSc Nikola Pejovic			
Methodology	Lectures, consultations, colloquiums			
Plan and program of work				
Preparing week	Preparation and registration of the semester			
I week lectures	Introduction to Physiology, Blood and its function, Blood types			
I week exercises	The counting of red blood cells, blood plasma and blood serum, blood proteins, hemoglobin, hemolysis and erythrocyte sedimentation rate			
II week lectures	The cardiovascular system			
II week exercises	Stanijus ligatures, the behavior of heart according to the law of all or nothing, the influence of temperature on heart rate, cardiac auscultation, arterial pulse			
III week lectures	Lymphatic system			
III week exercises	The counting of leukocytes and platelets, blood coagulation, blood grouping and hematological indices			
IV week lectures	Respiration, Enzymes			
IV week exercises	Pulmonary volumes and capacities, the role of diaphragm in respiration, spirometry and confirm the presence of CO2 in exhaled air			
V week lectures	Physiology of digestion			
V week exercises	Digestion in the mouth, salivary pH determination, ptyalin and proving its effects			
VI week lectures	Digestion in the ruminants, Colloquium I			
VI week exercises	The acidity of the gastric juice, pepsin, chymosin			
VII week lectures	Digestion in non ruminants, Colloquium corr			
VII week exercises	Pancreatic juice, the effect of trypsin, amilase and sucrase, bile, bile pigments and bile acids			
VIII week lectures	Resorption and secretion			
VIII week exercises	Physico-chemical properties of urine, urine chemical constituents, pathological ingredients of urine, proving of urea, uric acid, hemoglobin,			
IX week lectures	Vitamins, Endocrine system			
IX week exercises	Vitamins, Hormones			
X week lectures	Metabolism and regulation of body temperature			
X week exercises	Glycolysis, Krebs cycle and β-oxidation			
XI week lectures	Physiology of reproduction of domestic animals			
XI week exercises	Hormones and Oestrous cycle			
XII week lectures	Physiology of nervous system			
XII week exercises	Reflexes			

XIII week lectures	Physiology of muscles
XIII week exercises	Isotonic and isometric contractions, simple muscular contraction, intensity of muscular contraction
XIV week lectures	Physiology of senses
XIV week exercises	Colloquium II
XV week lectures	Avian physiology
XV week exercises	Colloquium corr.
Student workload	A week: 7 x 40/30= 9 hours and 30 min Structure: 4 hours of lectures 2 hours exercise 3 hours and 30 min of student work, including consultations. During the semester: Teaching and the final exam: 9 hours and 30 min x16 = 96 hours. Necessary preparation (before semester administration, enrollment and verification): 2 x 9 hours and 30 min = 19 hours. Total hours for the course: 7 x 30 = 210 hours. Additional work to prepare the corrective final exam, including the exam taking 0 to 42 hours Structure: 152 hours (lectures) + 19 hours (preparation) + 39 hours (additional work

Per week	**Per semester**
7 credits x 40/30=9 hours and 20 minuts 4 sat(a) theoretical classes 0 sat(a) practical classes 2 excercises **3 hour(s) i 20 minuts** of independent work, including consultations	Classes and final exam: **9 hour(s) i 20 minuts x 16 =149 hour(s) i 20 minuts** Necessary preparation before the beginning of the semester (administration, registration, certification): **9 hour(s) i 20 minuts x 2 =18 hour(s) i 40 minuts** Total workload for the subject: **7 x 30=210 hour(s)** Additional work for exam preparation in the preparing exam period, including taking the remedial exam from 0 to 30 hours (remaining time from the first two items to the total load for the item) **42 hour(s) i 0 minuts** Workload structure: **149 hour(s) i 20 minuts (cources), 18 hour(s) i 40 minuts (preparation), 42 hour(s) i 0 minuts (additional work)**
Student obligations	the presence of lectures and exercises, doing the homework, tests, seminar paper
Consultations	2 hours during the week
Literature	. Stojić,V.: Veterinary physiology. Naučna KMD, 2010. 2. Stojić, V.: Veterinary physiology, Faculty of veterinary medicine Beograd, 1997, 1999. 3. Jovanović, M.: Physiology of domestic animals. Medicinska knjiga Beograd, 1984. 4. Božić A., Joksimovi
Examination methods	Regular lectures and exercises attendance (max. 5 pts), - Seminar work 5pts - I Colloquium: (max 20 pts) - II Colloquium II: (max 20 pts) - Final exam: (max 50 pts) Threshold for mark E is cumulative sum of 50 pts (≥5
Special remarks	
Comment	

Grade:	F	E	D	C	B	A
Number of points	less than 50 points	greater than or equal to 50 points and less than 60 points	greater than or equal to 60 points and less than 70 points	greater than or equal to 70 points and less than 80 points	greater than or equal to 80 points and less than 90 points	greater than or equal to 90 points