Course Unit Descriptor

Study Programme: Veterinary medicine

Course Unit Title: Veterinary physiology 1 and 2

Course Unit Code: 3IVM3O11 / 3IVM4O16

Name of Lecturer(s): Dr Zdenko Kanački, associate professor

Type and Level of Studies: Undergraduate academic studies

Course Status (compulsory/elective): Compulsory

Semester (winter/summer): Both (winter and summer semester)

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 13 (6+7)

Prerequisites: Anatomy 1, Anatomy 2, Chemistry, Biochemistry

Course Aims: The course allows student to acquire: 1. knowledge of the physiological processes in animal bodies, the mechanisms of their regulation and integration into a whole organism; 2. skill of methods and techniques for determining the basic physiological parameters; 3. skills to solve specific tasks in the field of veterinary physiology and successfully monitor the teaching of professional applicative subjects.

Learning Outcomes: Upon completion of the course of the subject Veterinary Physiology 1 and 2, student should be able to: 1. define and explain terms associated with life processes in animal bodies; 2. describe and analyze physiological processes in different organ systems and the body as a whole; 3. applicative methods and techniques for determining the basic physiological parameters of individual organ systems; 4. solving specific tasks in the field of veterinary physiology; 5. successfully monitor the teaching of professional applicative subjects.

Syllabus:

Theory: Introduction and importance of physiology in veterinary medicine. Physiology of the cell. Homeostasis and homeostatic mechanisms. Physiology of blood. The immune system physiology and antibodies. General principles of physiological regulation. Physiology of nerve system. Physiology of the senses. Physiology of the endocrine system. Physiology of muscle and movement. Physiology of the heart and circulation. Physiology of lymph and lymph system. Physiology of respiration. Physiology of digestion. Liver Physiology. Physiology of excretion. Metabolism of water, macro and microelements and vitamins. Energy metabolism and nutrition balance. Thermoregulation. Physiology of the skin and mammary gland.

Practice: Transportation of substances through the cell membrane. Physiology of blood. Physiology of the nervous system and senses. Physiology of the endocrine system. Physiology of muscle. Physiology of the heart and circulation. Physiology of respiration. Physiology of digestion. Liver Physiology. Physiology of excretion. Thermoregulation and thermogenic effort. Vivisection.

Required Reading:

1. Stojić V.: Veterinarska fiziologija. Naučna, Beograd, 2007

2.Reece W., Erickson H., Goff J., Uemura E.: Dukes' Physiology of Domestic Animals. Thirteenth Edition, Wiley Blackwell.

3. Kanački Z.: Praktikum iz fiziologije 1, Univerzitet u Novom Sadu, Poljoprivredni fakultet, 2014.

4. Kanački Z.: Praktikum iz fiziologije 2, Univerzitet u Novom Sadu, Poljoprivredni fakultet, 2014.

Weekly Contact Hours: 6+6 (6	Lectures: 3+3	Practical work: 3+3
in one semester)	Lectures: 5+5	

Teaching Methods: Lectures and practical classes.				
Knowledge Assessment (maximum of 100 points):				
Pre-exam obligations	points	Final exam	points	
Lecture attendance	5	oral exam	50	
Exercise attendance	5	practical part of the exam	10	
Test	20			
Seminar	10			
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam,				
project presentation, seminars, etc.				