Module name:		**Animal physiology 1**
ECTS:		**6**
Learning effects		Course outcomes:
Knowledge:	1	Student knows the functioning of individual cellular structures / systems / organs such as: the nervous system, CNS, ANS, skeletal muscles, cardiac muscle, cardiovascular system, sense organs, respiratory system.
	2	Student knows the physiological fundamentals / mechanisms of sensation and perception, movement and maintenance of body posture, physiological fundamentals of behaviour, endocrinology (hypothalamic-pituitary axis, peripheral endocrine glands and tissue hormones), regulation of blood flow in vessels, gas exchange.
	3	Student knows the functional connections between the organs / tissues.
	4	Student knows the methods of examining parameters determining the physiological state of the body such as: the nervous system (chronaxie, rheobase, conduction speed); skeletal muscle mechanics; physiological parameters of the cardiovascular system (stroke volume, minute volume, etc., blood pressure); respiratory system (air volumes).
	5	Student knows the mechanisms integrating the functioning of the whole organism and maintaining the body's homeostasis (CNS, AUN, transmitters, co-transmitters, neuromodulators in the nervous system, hormones, Eicosanoids, cytokines, growth factors, circulatory system).
	6	Student knows the disturbances in the functioning of the organs as examples of malfunctioning of the body.
	7	Student knows the concepts of intellectual property protection.
Skills:	1	Student can explain the physiological mechanisms / molecular mechanisms of cellular structures / organs / systems such as: the nervous system, CNS, AUN, skeletal muscles, heart muscle, cardiovascular system, sense organs, respiratory system.
	2	Student can explain the physiological fundamentals / mechanisms of sensation and perception, movement and maintenance of body posture, physiological fundamentals of behaviour, endocrinology (hypothalamic-pituitary axis, peripheral endocrine glands and tissue hormones), regulation of blood flow in vessels, gas exchange.
	3	Student can indicate how the discussed tissues / organs / systems can affect each other and what are the consequences for the functioning of the body.
	4	Student can indicate the parameters describing the physiological state of the organs / systems in question - can define the physiological (health) state of the body.
	5	Student can plan and carry out a simple experiment allowing the analysis of physiological parameters.
	6	Student can perform a knee reflex test, examine the pulse, blood pressure, blood saturation and perform an ECG.
	7	Student can analyse information from publicly available databases, including scientific ones.
Competences:	1	Student is ready to assess and interpret the functioning of the body / systems / organs / cells in the context of the activities of the nervous system, CNS, CNS, skeletal muscle, cardiac muscle, cardiovascular system, sense organs, respiratory system, endocrine system, their interaction and ensuring homeostasis of the body.
	2	Student is ready to assess the physiological parameters determining the animal's health in veterinary diagnostics and treatment of diseases.

	3	Student is ready to perform basic physiological (scientific) experiments and to draw correct conclusions from the observations made.
	4	Student is critical of his knowledge and constantly updates it in accordance with the latest state of general knowledge, uses scientific sources to expand his knowledge.
	5	Student is ready to cooperate - consult other people and share the knowledge with others.
	6	Student is ready to apply his knowledge and skills in further stages of education.
Objectives of the module required to obtain learning effects:		During the animal physiology course in the winter semester, student acquires basic and advanced knowledge on the physiology of nerve system, motion apparatus, cardiovascular system, respiratory system and endocrinology. The acquired knowledge will allow to understand the functioning of individual organs / systems as well as the body as a whole.
Assessment methods:		Seminars, 2 written tests