UNIVERSITY OF WARMIA AND MAZURY IN OLSZTYN
Faculty of Veterinary Medicine

Neurophysiology

ECTS: 1.00

SUBJECT MATTER CONTENT

LECTURE
Synaptic transmission in the central nervous system (excitatory and inhibitory synapses). Cerebral movement control mechanisms. The neuroendocrine role of the hypothalamus. Higher brain functions, sleep and wakefulness.

CLASSES
Classes in neurophysiology cover: the basics of the anatomy of the central nervous system (CNS). Discussion of blood circulation and cerebrospinal fluid in (CNS) and specificity of brain metabolism. Presentation and discussion of the physiology of the senses with particular emphasis on the sense of smell, sight and hearing. Introduction to behavioral neurophysiology - limbic system, punishment and reward system and neurophysiological mechanisms of aggressive behavior. Central nervous system neurotransmitters and neuromodulators, and major pathways in the brain. The concept of neuronal plasticity and neurodegenerative processes in the CNS.

TEACHING OBJECTIVE

To acquaint students with issues concerning the functioning of the central nervous system in animals. The aim of the course is also to provide students with knowledge about the physiology of sense organs, the functioning of the limbic system and issues related to the most important pathways in the central nervous system. This subject will be a bridge between neurophysiology and clinical diagnostics of the central nervous system, in particular of the brain in acompaniament pets.

DESCRIPTION OF THE LEARNING OUTCOMES OF THE COURSE IN RELATION TO THE DESCRIPTION OF THE CHARACTERISTICS OF THE SECOND LEVEL LEARNING OUTCOMES FOR QUALIFICATIONS AT LEVELS 6-8 OF THE POLISH QUALIFICATION FRAMEWORK IN RELATION TO THE SCIENTIFIC DISCIPLINES AND THE EFFECTS FOR FIELDS OF STUDY:

Symbols for outcomes related to the discipline: R/WA_P7S+++

Symbols for outcomes related to the field of study: A.W1. +++, K.1.+, A.U1.+, A.W11. +

LEARNING OUTCOMES:

Knowledge:

W1 –
W2 – A. Knows and understands the structure, function and mechanisms of regulation of organs and systems of the animal body (respiratory, digestive, circulatory, excretory,

Legal acts specifying learning outcomes:
682/2020
Disciplines: Veterinary science
Status of the course: Fakultatywny
Group of courses:B - przedmioty kierunkowe
Code: ISCED 0841
Field of study: Veterinary Medicine
Scope of education:
Profile of education: General academic
Form of studies: full-time
Level of studies: uniform master's studies
Year/semester: 3/6

Types of classes: Lecture, Classes
Number of hours in semester: Lecture: 5.00, Classes: 10.00
Language of instruction: Polish
Introductory subject: Animal anatomy, animal physiology
Prerequisites: Students knows the basic information on the physiology of the nervous system

Name of the organisational unit conducting the course: Katedra Fizjologii Klinicznej
Person responsible for the realization of the course:dr hab. wet. Michał Bulc, prof. UWM
e-mail: michal.bulc@uwm.edu.pl

Additional remarks:

nervous, reproductive, hormonal, immunological and skin coatings) and their integration at the body level.

W3 – A. Knows and understands the physicochemical and molecular basis of the functioning of the sense organs

Skills:

U1 – A. Is able to define the physiological state as the animal's adaptation to changing environmental factors

Social competence:

K1 – K. Is ready to deepen his knowledge and improve his skills

TEACHING FORMS AND METHODS:

Classes(W1;U1;K1;):Classes in the form of exercises
Lecture(W2;W3;):Classes in the form of a lecture

FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Lecture (Colloquium test) - To pass the lectures, you must obtain at least 65% of the possible points. Grading is based on the point thresholds described in the faculty procedure "Principles of student assessment". A student may retake the exam twice -

Classes (Colloquium test) - To pass the lectures, you must obtain at least 65% of the possible points. Grading is based on the point thresholds described in the faculty procedure "Principles of student assessment". A student may retake the test twice -

BASIC LITERATURE:

SUPPLEMENTARY LITERATURE: