

Clinical and laboratory diagnostics II

ECTS: 4.00

SUBJECT MATTER CONTENT

LECTURE

Clinical diagnosis of diseases of the digestive system, diseases of the nervous system, diseases of the urinary system. Obtaining and preparing biological material for laboratory research. Storage and transport of samples for laboratory tests. Organization of a veterinary laboratory. Diagnostic methods used in laboratory diagnosis of internal diseases.

PRACTICAL CLASSES

The study of the digestive system: abdominal wall, abdominal organs (viewing, palpation, percussion, auscultation), probing the stomach and rumen, rectal examination, puncture into the peritoneal cavity, probing and evaluation of peritoneal fluid. The rumen fluid analysis: physical and chemical properties, number and consition of rumen protozoa. Examination of the nervous system: Behavior, skull and spine examinations, superficial and proprioceptive sense, motor activity, sensory organs. The study of the urinary tract: visual inspection, palpation, catheterization of the bladder. Laboratory exercises: organization of veterinary laboratory, collecting, storage, transportation of biological material. Laboratory testing of urine, morphological examination of blood. The general health profile of small and large animals.

LABORATORY CLASSES

The study of the digestive system: abdominal wall, abdominal organs (viewing, palpation, percussion, auscultation), probing the stomach and rumen, rectal examination, puncture into the peritoneal cavity, probing and evaluation of peritoneal fluid. The rumen fluid analysis: physical and chemical properties, number and consition of rumen protozoa. Examination of the nervous system: Behavior, skull and spine examinations, superficial and proprioceptive sense, motor activity, sensory organs. The study of the urinary tract: visual inspection, palpation, catheterization of the bladder. Laboratory exercises: organization of veterinary laboratory, collecting, storage, transportation of biological material. Laboratory testing of urine, morphological examination of blood. The general health profile of small and large animals.

TEACHING OBJECTIVE

The aim of the lectures is introducing the student with the methods and methods of diagnostic tests of individual systems. The exercises shape the skill of practical clinical examination and additional tests, including laboratory tests, and the interpretation of results

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: Legal acts specifying learning outcomes: 682/2020 Disciplines: Veterinary science Status of the course: Obligatoryjny 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, Laboratory classes, Practical classes Number of hours in semester:Lecture: 15.00, Laboratory classes: 20.00, Practical classes: 10.00 Language of instruction:Polish Introductory subject: animal anatomy, animal physiology, histology, topographic anatomyg Prerequisites: good knowledge of the subject of introductory subjectsg

Name of the organisational unit conducting the course:Katedra Diagnostyki Klinicznej Person responsible for the realization of the course:prof. dr hab. wet. Andrzej Rychlik e-mail: rychlik@uwm.edu.pl

Additional remarks: practical and laboratory classes in groups of 12-15 students. Depending on the epidemiological situation, the form of lectures and excercises may be changed. Symbols for outcomes related to the discipline:

R/WA_P7S+++

Symbols for outcomes related to the field of study:

K.1.+, A.U2. +, C.U3. ++, C.U4. +, C.U2. +, A.U6. +, A.W4. +, B.W2. +, A.W1. +, A.U15. +, B.U3. +, K.4.+, A.U14. ++, B.W6. +, B.U2. ++, B.W11. +, B.U6. ++, A.W2. ++, A.U19. +, A.U18. +, K.9.+, B.W1. ++, A.W11. +, B.W4. +, A.U4. +

LEARNING OUTCOMES:

Knowledge:

W1 – implements the rules of diagnostic procedures (including differential diagnosis) based on the knowledge of the structure of animal organisms and the rules of their functioning underlying health conditions and pathologies, knows the mechanisms of metabolic disorders, knows the rules of clinical examination, and interprets the results of physical examinations (physical and additional) properly

W2 –

Skills:

U1 – conducts a medical and veterinary interview in order to obtain information about a patient or herd of animals, conducts a clinical examination of the digestive, nervous and urinary systems, performs laboratory tests of the red blood cells, white blood cells, rumen and urine. Can assess the degree of disturbances in systemic homeostasis, know how to deal with animals during the examination and can instruct other people, can adequately describe the test results and consult difficult cases

U2 – collects and stores material for laboratory analysis, performs standard rapid laboratory tests, knows how to use basic equipment for hematological and biochemical analyzes. Has the ability to interpret the results of direct and indirect imaging examinations in a basic level.

U3 - has the ability to work in a team, use a language that can be understood in any situation

U4 – has the ability to continue education, follow the latest professional literature also in a foreign language, have the ability to assess the conditions of the work of a veterinarian

Social competence:

K1 - is able to communicate with people from his environment and animal owners in a clear and understandable way, use various sources of information, make responsible decisions

TEACHING FORMS AND METHODS:

Lecture(W1;W2;U1;U2;U4;K1;):information lecture, problem lecture, lectures with multimedia presentation. Depending on the epidemiological situation, the form of lectures may be changed.

Practical classes(W1;W2;U1;U2;U3;U4;K1;):practical exercises with animals, didactic discussion, Depending on the epidemiological situation, it is allowed to change the form of the classes

Laboratory classes(W2;U1;U2;U3;):

FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Lecture (Written exam) - Test exam. To pass the final exam, you must obtain at least 65% of the possible points. The grading of grades is based on the established score thresholds, i.e. assigning the grade to a specific percentage of points that can be obtained. These thresholds are as follows: 94-100% very good (5.0), 87-93% good plus (4.5), 80-86% good (4.0), 73-79% satisfactory plus (3.5), 66-72% pass (3.0), less than 65% and less fail (2.0). - Laboratory classes (Colloquium practical) - -

Practical classes (Colloquium practical) - Practical test - the student performs a clinical examination of animals and interprets the test results. To pass the test, the student must obtain at least 66 possible points. grading of grades is based on the score thresholds described in the faculty procedure "Principles of grading students". The student may attempt to improve the test twice. The condition for obtaining the final credit in practical exercises is to obtain positive marks from all tests taking place in the course of classes. In the case of passing all the tests, the final grade for passing the exercises is issued on the

basis of the arithmetic mean value of all the grades of the tests. Failure to pass any of the tests is tantamount to obtaining a final unsatisfactory grade. Depending on the epidemiological situation, it is allowed to change the form of changing the colloquium -

BASIC LITERATURE:

1. F. Nagórski, W. Stankiewicz, *Diagnostyka Kliniczna Chorób Wewnętrznych Zwierząt Użytkowych*, Wyd. PWN, R. 1968

2. J. Marek, J. Mocsy, *Diagnostyka Kliniczna Chorób Zwierząt Domowych*, Wyd. PWRiL, R. 1958

3. T. Janiak, Diagnostyka Kliniczna Chorób Zwierząt Domowych, Wyd. PWN, R. 1989

4. W. Baumgartner, *Diagnostyka Kliniczna Zwierząt*, Wyd. Elsevier Urban, R. 2009 5. Z. Markiewicz, *Przewodnik do ćwiczeń laboratoryjnych z diagnostyki chorób wewnętrznych*, Wyd. Wydawnictwo ART Olsztyn, R. 1989

6. Z. Markiewicz, K. Markiewicz, *Choroby układu moczowego zwierząt*, Wyd. Wydawnictwo ART Olsztyn, R. 1986

7. J. Nicpoń, *Badania kliniczne i laboratoryjne w diagnostyce chorób wewnętrznych zwierząt domowych*, Wyd. Wydawnictwo UP we Wrocławiu, R. 2015

SUPPLEMENTARY LITERATURE:

1. I. SchwCendenwein, A. Moritz, *Diagnostyka Laboratoryjna Psów i Kotów*, Wyd. Galaktyka, R. 2021