

Pathomorphology II

ECTS: 5.00

SUBJECT MATTER CONTENT

LECTURE

The contents of the lectures on pathomorphology II include morphological changes confirmed by post-mortem examination, occurring in animals (farm and companion animals) in organs and tissues in the course of non-infectious diseases, resulting from genetic, immunological, metabolic circulatory disorders, and in the course of neoplastic diseases. Lectures include also etiopathogenesis of morphological changes and the application of histopathology and necropsy in diagnosis of non-infectious and neoplastic diseases of various animal species.

AUDITORIUM CLASSES

ĆWICZENIA:The aim of the practical classes is to familiarize the student with the morphological changes in internal organs and tissues in the course of non-infectious and neoplastic diseases of animals. During the practical classes, the student performs necropsies of various animal species, acquires the ability to recognize developmental and circulatory disorders, regressive changes, inflammations and progressive changes (including neoplasia). Necropsy includes pathology of the skin and subcutaneous tissue, musculoskelatal, digestive, respiratory, endocrine, excretory, endocrine, reproductive, lymphatic and nervous systems (including sensory organs). Moreover, the practical classes focus on pathological diagnosis of non-infectious and neoplastic diseases of farm and companion animals.

PRACTICAL CLASSES

ĆWICZENIA:The aim of the practical classes is to familiarize the student with the morphological changes in internal organs and tissues in the course of non-infectious and neoplastic diseases of animals. During the practical classes, the student performs necropsies of various animal species, acquires the ability to recognize developmental and circulatory disorders, regressive changes, inflammations and progressive changes (including neoplasia). Necropsy includes pathology of the skin and subcutaneous tissue, musculoskelatal, digestive, respiratory, endocrine, excretory, endocrine, reproductive, lymphatic and nervous systems (including sensory organs). Moreover, the practical classes focus on pathological diagnosis of non-infectious and neoplastic diseases of farm and companion animals.

TEACHING OBJECTIVE

The aim of the course is to teach the recognition of morphological changes in tissues and organs, caused by physical, biological and chemical factors, and the use of the pathomorphological examination to diagnose non-infectious veterinary diseases.

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: 4/7

Types of classes: Lecture, Practical classes, Auditorium classes Number of hours in semester:Lecture: 30.00, Practical classes: 15.00, Auditorium classes: 30.00 Language of instruction:Polish Introductory subject: anatomy, topographic anatomy, physiology Prereguisites: anatomy, topographic

anatomy, physiology knowlegde

Name of the organisational unit conducting the course:Katedra Anatomii Patologicznej Person responsible for the realization of the course:dr hab. wet. Iwona Otrocka-Domagała, prof. UWM e-mail: i.otrockadomagala@uwm.edu.pl

Additional remarks:

Symbols for outcomes related to the discipline:

R/WA_P7S+++

Symbols for outcomes related to the field of study:

K.1.+, B.U16. +, A.U14. +, A.W20. +, B.W3. +, B.W2. +, K.4.+, B.W1. +, K.5+, K.2.+, A.W1. +

LEARNING OUTCOMES:

Knowledge:

W1 – The student knows and describes the morphological changes in the animal organism, caused by pathological agents (especially non-infectious). Uses appropriate pathomorphological nomenclature necessary in contacts with other doctors or professional organizations. Diagnoses of the animal health condition, determines the type of non-infectious disease and directs further diagnostics.

Skills:

U1 – The student is able to perform the necropsy of large farm animals (horses, cows, sheep, goats, pigs) and companion pet animals (dogs, cats, rodents, rabbits). Chooses appropriate research methods, decides about the necessity to collect material for histopathological examination, depending on the macroscopic changes observed during the necropsy. Describes and identifies non-infectious diseases in animals. He efficiently uses medical tools and protective materials.

Social competence:

K1 – The student uses objective sources of information, approaching them critically, formulates conclusions based on the observed pathological changes and the results of additional diagnostic tests. Presents an appropriate ethical attitude, demonstrating responsibility for the decisions he makes towards people and animals. Shows tolerance for behaviors resulting from cultural and social differences.

TEACHING FORMS AND METHODS:

Lecture(W1;U1;K1;):Lecture - gross changes in organs and tissues of animals in the course of non-infectious diseases multimedial presentation)

Practical classes(W1;U1;K1;):Laboratory classes - Performing the necropsy of selected animal species, preparing necropsy protocols.

Auditorium classes(W1;U1;K1;):Laboratory classes - Performing the necropsy of selected animal species, preparing necropsy protocols.

FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Lecture (Exam) - Written or oral exam is after three semesters of the pathomorphology. -Practical classes (Colloquium practical) - Each student performs necropsies and writes a necropsy report (obtaining grade). To pass the semester, student has to gain positive grades from each of tests and of at least one necropsy and necropsy report. -

Auditorium classes (Colloquium test) - There are 3 written tests per semester. To pass the test, you must obtain at least 65% of the possible points. The 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 receiving the final exam in the exercises is to obtain positive grades from all tests taking place in the course of the classes, and to obtain a positive grade for the autopsy and the autopsy protocol. If all tests are passed, the final grade for the exercises is issued on the basis of the arithmetic mean value of all grades obtained from the tests, grades obtained from the performed autopsies and postmortem protocols. Failure to pass any of the tests is tantamount to obtaining an unsatisfactory final grade in the exercises. In the event of a top-down suspension of classroom classes and the need for distance learning, the methods of verifying the achievement of learning outcomes declared in the syllabus, i.e. the forms of passing the exam and exercises, may change in a manner appropriate to the situation. -

BASIC LITERATURE:

1. T. Rotkiewicz, A. Krasnodębska-Depta, A. Koncicki, *Patomorfologiczne metody badania zwierząt*, Wyd. ART Olsztyn, R. 1999, s.

2. J.F. Zachary, M.D. McGavin, *Pathologic Basis of Veterinary Disease, 5th, ed.*, Wyd. Mosby, R. 2012, s.

3. J.F. Zachary, M.D. McGavin, *Pathologic Basis of Veterinary Disease Expert Consult, 6th, ed.*, Wyd. Mosby, R. 2016, s.

4. J.A. Madej, T. Rotkiewicz, Z. Nozdryn-Płotnicki, *Patologia szczegółowa zwierząt*, Wyd. UWM Olsztyn, R. 2007, s.

SUPPLEMENTARY LITERATURE:

1. G. Maxie, *Maxie MG, Jubb, Kennedy Palmer's Pathology of Domestic Animals 5th ed.*, Wyd. Elsevier, R. 2007, s.

2. G. Maxie, *Maxie MG, Jubb, Kennedy Palmer's Pathology of Domestic Animals Vol.1, 2, 3; 6th ed.*, Wyd. Elsevier, R. 2015, s.

3. M.L. Jackson, Veterinary Clinical Pathology, Wyd. Blackwell Science, R. 2011, s.

4. J. Rothuizen et al., WSAVA Standards for Clinical Histological Diagnosis of Canine and Feline Liver Diseases, Wyd. Saunders, R. 2006, s.

5. V. Valli, Veterinary Comparative Hematopathology, Wyd. Blackwell, R. 2007, s.

6. J. van Dijk et al., *Color Atlas of Veterinary Pathology, 2nd ed.*, Wyd. Saunders, R. 2007, s. 7. S.J. Withrow, *Withrow and MacEwen's Small Animal Clinical Oncology*, Wyd. Elsevier, R.

2012, s.