UNIVERSITY OF WARMIA AND MAZURY IN OLSZTYN
Faculty of Veterinary Medicine

Pathomorphology I

ECTS: 5.00

SUBJECT MATTER CONTENT

AUDITORIUM CLASSES
ĆWICZENIA:During the practical classes the student becomes familiar with the morphological changes observed within tissues and organs during various infectious, parasitic and non-infectious (including neoplastic) diseases in animals. Student performs histopathologic examination and learns to recognize pathological changes in organs and tissues of cattle, horses, dogs, cats, sheep, pigs and poultry, characteristic for certain developmental anomalies, circulatory disorders, regressive changes, inflammations, progressive changes and neoplasia.

PRACTICAL CLASSES
ĆWICZENIA:During the practical classes the student becomes familiar with the morphological changes observed within tissues and organs during various infectious, parasitic and non-infectious (including neoplastic) diseases in animals. Student performs histopathologic examination and learns to recognize pathological changes in organs and tissues of cattle, horses, dogs, cats, sheep, pigs and poultry, characteristic for certain developmental anomalies, circulatory disorders, regressive changes, inflammations, progressive changes and neoplasia.

LECTURE
The contents of the lectures on pathomorphology I include morphological changes observed microscopically in organs and tissues of animals in the course of diseases resulting from genetic, metabolic, immunologic and circulatory disorders. Lectures include microscopic changes observed in the course of infectious (and parasitic) and non-infectious diseases. Furthermore, lectures include also the etiopathogenesis of morphological disorders application of histopathological examination in diagnosis of veterinary diseases (infectious, non-infectious, neoplastic).

TEACHING OBJECTIVE
The purpose 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 histopathological examination to diagnose 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:

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

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, Auditorium classes, Practical classes
Number of hours in semester: Lecture: 30.00, Auditorium classes: 30.00, Practical classes: 15.00
Language of instruction: Polish
Introductory subject: anatomy, histology, physiology,
Prerequisites: anatomy and histology knowledge,

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.otrocka-domagala@uwm.edu.pl

Additional remarks:

Symbols for outcomes related to the field of study: B.W2. +, B.W3. +, A.W20. +, K.4.+, B.W1. +, K.9.+, A.W1. +, K.2.+, K.8.+, C.U2. +

LEARNING OUTCOMES:

Knowledge:

W1 –

Skills:

U1 –

Social competence:

K1 –

TEACHING FORMS AND METHODS:

Lecture(W1;U1;K1;):
Auditorium classes(W1;U1;K1;):
Practical classes(W1;U1;K1;):

FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Lecture (Exam) - There is an exam after three semesters of the Pathomorphology (after Pathomorphology III). -
Auditorium classes (Colloquium test) - There are 3 written or oral 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 pass from the exercises is to obtain positive grades from all tests taking place during the classes. In case of passing all the tests, the final grade for the exercises is issued on the basis of the arithmetic mean value of all the grades obtained in the tests. 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. -
Practical classes (Colloquium practical) - In the semester there are practical tests of the knowledge of histopathological preparations, held simultaneously with the written / oral tests or at the end of the semester. In order to pass the semester, the student must obtain a positive grade for each of the credits. -

BASIC LITERATURE:

1. J.F. Zachary, M.D. McGavin, *Pathologic Basis of Veterinary Disease 5th ed.*, Wyd. Mosby, R. 2012, s.
2. T. Rotkiewicz (red.), *Patomorfologia komórek i tkanek zwierząt*, Wyd. UWM, R. 2010, s.
3. J.F. Zachary, M.D. McGavin, *Pathologic Basis of Veterinary Disease Expert Consult 6th ed.*, Wyd. Mosby, R. 2016, s.
4. Kumar V., Abbas AK, Aster J, pod redakcją Olszewskiego W.T. , *Robbins Patologia 2nd ed.*, Wyd. Elsevier Urban Partner, Wrocław, R. 2014, s.
5. J.A. Madej, T. Rotkiewicz, *Patologia ogólna zwierząt*, Wyd. UWM, R. 2011, s.

SUPPLEMENTARY LITERATURE:

1. J. Rothuizen et al., *WSAVA Standards for Histological and Clinical Diagnosis of Canine and Feline Liver Diseases*, Wyd. Elsevier, R. 2006, s.
2. R.L. Cowell, R.D. Tyler, J.H. Meinkoth, D.B. De Nicola, *Diagnostic cytology and hematology of the dog and cat*, Wyd. Mosby, R. 2008, s.
3. G. Kanel, J. Korula , *Atlas of Liver Pathology 3rd ed.*, Wyd. Saunders, R. 2010, s.
4. Meuten DJ, ed, *Tumors in Domestic Animals. 5th ed.*, Wyd. Blackwell, R. 2017, s.
5. F. Cian, K. Freeman, *Veterinary Cytology: Dog, Cat, Horse and Cow (Self-Assessment Colour Review) 2nd ed.*, Wyd. CRC Press, R. 2017, s.
6. S.A. Geller, L.M. Petrovic, *Biopsy interpretation of the liver*, Wyd. Wyd.Lippincott Williams Wilkins, R. 2009, s.

7. R.L. Cowell, R.D. Tyler, *Diagnostic Cytology and Hematology of the Horse.2nd ed.*, Wyd. Mosby, R. 2002, s.
8. S.J. Withrow, *Withrow and MacEwens's Small Animal Clinical Oncology*, Wyd. Elsevier, R. 2012, s.