

UNIVERSITY OF WARMIA AND MAZURY IN OLSZTYN Faculty of Veterinary Medicine

# Course sylabus - part A Animal anatomy II

04SJO-AA2 ECTS: 9.00 CYCLE: 2024L

# SUBJECT MATTER CONTENT

#### LECTURE

Structure of the nasal cavity, mouth, pharynx, larynx; general issues relating to cranial nerves; head area - skull base, sublingual gland, parotid gland, sphenopalatine fossa; sense organs – eye and ear; anatomical organization of the organs of the thoracic cavity (pleural relations), pleura, mediastinum, heart, fetal circulation; anatomical organization of abdominal organs, peritoneum; liver, pancreas; digestive system of carnivores, pigs, ruminants, horses; anatomical organization of the pelvic organs; structure of the urinary system; female and male reproductive system; structure of the placenta (taking into account species differences); lymphatic system; leather derivatives.

#### **AUDITORIUM CLASSES**

Theoretical and practical topics concerning the regions of the head and their structures (organs, nerves, and blood vessels) include the following areas: the cranial base, sublingual region, parotid gland, and the pterygopalatine fossa. Additionally, theoretical and practical topics cover the organs of the thoracic cavity, abdominal cavity, and pelvic cavity in the dog, pig, and ruminants, as well as issues related to the organs of the urinary system and the male and female reproductive systems.

### **PRACTICAL CLASSES**

Dissections of the head area - skull base, sublingual gland, parotid gland, sphenopalatine fossa; eye preparation; preparation of thoracic organs; exenterations - abdominal and pelvic organs of dogs, pigs, ruminants, comparison and analysis of abdominal and pelvic organ preparations of horses; anatomy of the urinary system and the female and male reproductive system.

### **TEACHING OBJECTIVE**

The aim of the education is to familiarize students with the anatomy of the head, as well as the organs of the thoracic cavity, abdominal cavity, and pelvic cavity.

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

A.U1.+, K.1.+, A.W1. +

Legal acts specifying learning outcomes: 682/2020 **Disciplines:** Veterinary science Status of the **course:**Obligatoryjny Group of courses:A przedmioty podstawowe 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: 1/2

**Types of classes:** Lecture, Auditorium classes, Practical classes

Number of hours in semester:Lecture: 45.00. Auditorium classes: 40.00, Practical classes: 20.00 Language of instruction: English Introductory subject: Animal Anatomy is a basic subject with which students are introduced from the first semester of the study program. Some introductory aspects may be presented in high school biology classes. Prerequisites: Animal anatomy is a basic subject that students become familiar with from the first semester of their studies. Some introductory aspects may be presented in high school biology classes.

#### Name of the organisational unit conducting the course:Katedra Anatomii Zwierząt Person responsible for the realization of the course:dr hab. wet. Michał Załęcki, prof. UWM e-mail: michal.zalecki@uwm.edu.pl

Additional remarks:

# related to the field of study:

## LEARNING OUTCOMES: Knowledge:

W1 – The student acquired knowledge of the structure and functions of the digestive, urinary, circulatory, respiratory and endocrine systems of domestic animals. Student knows the structure and functioning of the sense organs as well as the scope and type of the area innervated by each cranial nerve.

## Skills:

U1 – The student is able to use basic preparation tools. Is able to determine and plan the preparatory method of accessing and visualizing individual anatomical structures without excessive, and as limited as possible, damage to other tissues. Skillfully uses appropriate scientific sources to find relevant information on anatomical issues.

## Social competence:

K1 – The student is aware of the importance of knowledge of issues in the field of anatomy for a veterinarian and for further study of issues in the field of both, basic and clinical sciences. Follows ethical principles.

# TEACHING FORMS AND METHODS:

Lecture(W1;U1;K1;):Lectures are based on the presentations conducted by highly specialized teachers. The following forms of didactic materials are used: richly illustrated presentations (containing photos of specimens owned by the Department), animations, specialized 3D graphic programs showing the three-dimensional anatomy of various animal species, ready to use anatomical specimens (plastinates).

Auditorium classes(W1;U1;K1;):The dissection rooms are equipped with a modern audio-visual system that allows observation of anatomical dissections on monitors and multimedia boards. These boards additionally enable the overlaying of colorful graphics on the displayed images, significantly facilitating the visualization of anatomical concepts. Theoretical concepts that enable understanding of the specific structure of anatomical systems (such as the location of nerve nuclei, nerve ganglia, and the organization of the nervous system) are presented through richly illustrated presentations.

Practical classes(W1;U1;K1;):During the classes, natural anatomical specimens prepared using various methods (plastinates, dried specimens, corrosion casts), as well as appropriately preserved animal specimens (so-called "wet specimens") on which dissections are performed, are utilized. In addition, specialized anatomical models are used. For three-dimensional visualization of the described structures, specialized 3D software is employed, presenting detailed anatomical features of various animals.

# FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Lecture (Written exam) - Knowledge of the lectures content is verified during partial exams conducted during the semester and finally during the final Animal Anatomy exam consisting of two parts: written and practical. The exam takes place after the second semester. -

Auditorium classes (Colloquium test) - Colloquium - There are three colloquiums during the semester, combined with a practical part. The test grade is awarded based on the arithmetic mean value of the grades obtained for individual questions. A student may retake the test twice. The condition for receiving a final pass for the classes is to obtain positive grades for all tests held during the classes. If all tests are passed, the final grade for the exercises is given based on the arithmetic mean value of all grades obtained in tests. Failure to pass any of the tests is tantamount to receiving an insufficient final grade in the exercises. In the event of immediate suspension of on-site classes

and the need to teach remotely, the methods of verifying the achievement of learning outcomes declared in the syllabus, i.e. the forms of passing exams and exercises, may change in a manner appropriate to the situation. (K1, U1, W1). -

Practical classes (Colloquium practical) - Colloquium - There are three colloquiums during the semester, combined with a practical part. The test grade is awarded based on the arithmetic mean value of the grades obtained for individual questions. A student may retake the test twice. The condition for receiving a final pass for the classes is to obtain positive grades for all tests held during the classes. If all tests are passed, the final grade for the exercises is given based on the arithmetic mean value of all grades obtained in tests. Failure to pass any of the tests is tantamount to receiving an insufficient final grade in the exercises. In the event of immediate suspension of on-site classes and the need to teach remotely, the methods of verifying the achievement of learning outcomes declared in the syllabus, i.e. the forms of passing exams and exercises, may change in a manner appropriate to the situation. (K1, U1, W1). -

#### **BASIC LITERATURE:**

1. Konig, Liebich, *Veterinary Anatomy of Domestic Mammals - Textbook and Colour Atlas*, Tom 1, Wyd. Schattauer Studdgart New York, R. 2020

#### SUPPLEMENTARY LITERATURE:

1. John W. Hermanson Alexander de Lahunta, *Miller's Anatomy of the Dog*, Tom 1, Wyd. Elsevier, R. 2019

# Detailed description of ECTS credits awarded - part B

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# Animal anatomy II

The number of ECTS credits awarded consists of:

1. Contact hours with the academic teacher:

<ul> <li>participation in: Lecture</li> <li>participation in: Auditorium classes</li> <li>participation in: Practical classes</li> <li>consultation</li> </ul>	45.0 h 40.0 h 20.0 h 4.0 Total: 109.0 h
2. Independent work of a student:	
Self-study for partial exams based on other	50.00 h
materials.	
Self-study for partial exams based on materials	61.00 h
presented under the lectures and classes.	
Self-education for practical classes.	50.00 h

Total: 161.0 h

contact hours + independent work of a student Total: 270.0 h

1 ECTS credit = 25-30 h of an average student's work, number of ECTS credit = 270.0 h : 30.0 h/ECTS = 9.00 ECTS on average: 9.0 ECTS

- including the number of ECTS credits for contact hours with the direct participation of an academic teacher: 0,00 ECTS points,

- including the number of ECTS credits for hours of independent work of a student: