



## Practical anesthesiology of companion animals

ECTS: 1.00

### SUBJECT MATTER CONTENT

#### LECTURE

Classification of patients before general anesthesia, assessment of anesthetic risk. Discussion of techniques of intraoperative monitoring of patients. Discussion of selected groups of drugs used in sedation and general anesthesia. Selected infusion and inhalation anesthesia protocols for healthy patients and patients with systemic diseases. Pain - classification, scales of assessment and selected techniques of analgesic therapy. Intensive care aspects - cardiopulmonary resuscitation and shock therapy.

#### PRACTICAL CLASSES

Preoperative activities - cannulation of blood and arterial vessels, endotracheal intubation. Local and regional anesthesia in the area of the head, limbs and spine (injections into the epidural space). Conversion of doses of drugs used in general anesthesia and sedation. Performing the procedure of general anesthesia with the use of a syringe and drip infusion pump. General anesthesia with inhalation anesthesia - work with spontaneous and mandatory breathing (respirator). Clinical monitoring of the patient and assessment of vital signs. Responding to life-threatening conditions - cardiopulmonary resuscitation and shock therapy.

#### TEACHING OBJECTIVE

Familiarizing students with the basic related to the qualification and preparation of an animal for general anesthesia, post-anesthetic care, analgesic treatment and the methods of monitoring the animal. The student will acquire the ability to carry out the safe sedation procedure and general anesthesia in companion animals.

#### 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:**

K.1.+ , K.7.+ , B.W2. + , B.U3. + , B.U4. + , B.U11. + , A.W16. + , K.5+ , K.8.+ , B.W5. +

#### LEARNING OUTCOMES:

##### Knowledge:

W1 – The student knows and understands the terms of anesthesiology, knows and understands the scales of patient qualification for general anesthesia and pain assessment scales in companion animals. He knows the drugs used in premedication and general

**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:** 5/10

**Types of classes:** Lecture, Practical classes  
**Number of hours in semester:** Lecture: 8.00, Practical classes: 7.00  
**Language of instruction:** Polish  
**Introductory subject:** anatomy, topographic anatomy, pathophysiology, pharmacology, general surgery and anesthesiology  
**Prerequisites:** knowledge of anatomy and topographic anatomy, knowledge of the physiology and pathophysiology of individual body systems, knowledge of the pharmacokinetics and pharmacodynamics of substances used in general anesthesia

**Name of the organisational unit conducting the course:**  
**Person responsible for the realization of the course:** dr wet. Korina Michalska  
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**Additional remarks:**

anesthesia of dogs and cats and understands the mechanism of their action. He knows the classification of painkillers used in companion animals and understands their mechanisms of action, and knows the scheme of performing cardiopulmonary resuscitation in dogs and cats.

#### **Skills:**

U1 – The student is able to use methods of safe sedation of animals and methods of infusion and inhalation anesthesia in dogs and cats. He can practically apply methods of assessing and relieving pain in dogs and cats. Can interpret vital signs obtained during patient monitoring. He can perform perioperative activities - available intravenously, intra-arterial access, endotracheal intubation, administer drug mixtures in boluses and drip infusions, and perform injections in companion animals.

#### **Social competence:**

K1 – The student is ready to critically evaluate their own actions and improve the proposed solutions, and is ready to constantly expand their knowledge and improve their skills. The student shows responsibility for decisions made towards people and animals and adheres to ethical principles.

#### **TEACHING FORMS AND METHODS:**

Lecture(W1;U1;K1):

Practical classes(W1;U1;K1):

#### **FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:**

Lecture (Colloquium test) - There is one written test per semester. The content includes both the material presented during the exercises and lectures. 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 a positive mark from the test taking place during the classes. In the case of passing the test, the final grade for the exercises is the final grade for the optional subject. Failure to pass the test is tantamount to obtaining an insufficient final grade in the subject. 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 completing the exercises, may change in a manner appropriate to the situation. -

Practical classes (Colloquium test) - There is one written test per semester. The content includes both the material presented during the exercises and lectures. 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 a positive mark from the test taking place during the classes. In the case of passing the test, the final grade for the exercises is the final grade for the optional subject. Failure to pass the test is tantamount to obtaining an insufficient final grade in the subject. 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 completing the exercises, may change in a manner appropriate to the situation. -

#### **BASIC LITERATURE:**

1. Duke-Novakovski T, de Vries M, Seymour C, *Anestezjologia i leczenie przeciwbólowe psa i kota*, Tom 1, Wyd. Edra Urban Partner , R. 2017, s.
2. Muir WW, Hubbell JAE, Bednarski RM, Skarga RT, *Anestezjologia weterynaryjna*, Tom 1, Wyd. Elsevier Urban , Wrocław, R. 2008, s.

#### **SUPPLEMENTARY LITERATURE:**

1. Galanty M , *Chirurgia małych zwierząt , Chirurgia ogólna i anestezjologia , Skóra i tkanki miękkie*, Tom 1, Wyd. Powszechne Wydawnictwo Rolnicze i Leśne , Warszawa , R. 2013, s.