



SZKOŁA GŁÓWNA  
GOSPODARSTWA  
WIEJSKIEGO

## Neonatology of dogs and cats

### Educational subject description sheet

#### Basic information

<b>Field of study</b> Veterinary Medicine	<b>Didactic cycle</b> 2024/25
<b>Speciality</b> -	<b>Subject code</b> WETFVMS_D.5400K.633d37ec7d0a4.24
<b>Organizational unit</b> Faculty of Veterinary Medicine	<b>Lecture languages</b> english
<b>Study level</b> long-cycle	<b>Mandatory</b> Elective subjects
<b>Study form</b> full-time studies	<b>Block</b> Major subjects
<b>Education profile</b> General academic	<b>Disciplines</b> Veterinary medicine
<b>Coordinator</b>	Piotr Jurka
<b>Teacher</b>	Piotr Jurka
<b>Period</b> Semester 11	<b>Examination</b> Pass with grade
	<b>Activities and hours</b> Lecture: 15 Laboratory exercises: 15
	<b>Number of ECTS points</b> 2

#### Goals

Code	Goal
C1	Acquaintance with the specifics of newborn physiology and basic problems of the neonatal period. Preparation for proper handling of newborn dogs and cats as well as for independent identification of problems and undertaking appropriate remedial actions in life-threatening situations of newborns. The main goal is to master theoretical knowledge and acquire practical skills related to neonatology of dogs and cats. The content of lectures is a supplement to the content of practical classes

## Entry requirements

Animal physiology, Clinical and laboratory diagnostics, Pathophysiology, Dog and cat diseases

## Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
<b>Knowledge - Student knows and understands:</b>			
W1	fundamental differences in physiology and pathology between a newborn and an adult, the care of a healthy and problematic newborn, correctly interprets the result of a clinical trial, infectious and non-infectious agents, epidemiology, pathogenesis and diagnosis of puppy and kitten diseases the principles of antibiotic therapy in puppies and selects treatment accordingly, the correct medical nomenclature in relation to neonatology of puppies and kittens	B.W1, B.W3, B.W4, B.W6	Written credit
<b>Skills - Student can:</b>			
U1	assess the viability of the newborn, collect an interview and conduct a full clinical examination, give first aid to the weakened newborn and implements appropriate treatment, diagnose the most common, diseases and malformations of newborn dogs and cats	B.U1, B.U13, B.U3	Written credit
<b>Social competences - Student is ready to:</b>			
K1	assess the correctness of care for newborns in the farming facility, assess the patient's condition and choose the right treatment, being aware of own decisions constantly deepen his/her knowledge and cooperate with other veterinarian	KS.1, KS.4, KS.5, KS.8, KS.9	Written credit

## Study content

No.	Course content	Subject's learning outcomes	Activities

1.	<p>Lecture topics: (each for 3 hours)</p> <ol style="list-style-type: none"> <li>1. Embryo and fetal development. Stages of maturation of the immune system. Impact of maternal immunity on the newborn's immune response.</li> <li>2. Development and maturation of the newborn's digestive system. Anatomical and functional characteristics</li> <li>3. Maturation of the respiratory system of a newborn. Anatomical and functional characteristics.</li> <li>4. Physiology of the newborn's excretory system. Diuresis regulation. Neonatal Proteinuria.</li> <li>5. Regulation of water and electrolyte metabolism of a newborn. Differences compared to adult animals.</li> <li>6. Adaptation of a newborn to the external environment. Physiological processes in the perinatal period.</li> <li>7. Differences in the values of physiological parameters between newborns and adults.</li> <li>8. Relationships between pathology of pregnant mothers and problems in newborns. The problem of a weak newborn and perinatal mortality</li> </ol>	W1, U1, K1	Lecture
2.	<p>Topics of exercises: (each for 3 hours)</p> <ol style="list-style-type: none"> <li>1. Effect of perinatal disorders on the litter. Clinical examination of a puppy / kitten. APGARD score. Comparison of puppies within the litter. Birth weight assessment. Comparison of puppy / kitten parameters with mother's parameters.</li> <li>2. Treatments for puppies / kittens and intensive care. Intraperitoneal injections and intraosseous catheterization. Nutrition of puppies / kittens using a probe, syringe and by inserting an intragastric probe.</li> <li>3. Principles of antibiotic therapy, basic treatment and prevention in puppies / kittens.</li> <li>4. Diagnosis and treatment of the most common infectious and non-infectious diseases</li> </ol>	W1, U1, K1	Laboratory exercises

### Course advanced

Activities	Methods of conducting classes
Lecture	Lecture, E-learning - lecture part
Laboratory exercises	Case study, Discussion, Presentation

Activities	Examination method	Percentage
Lecture	Written credit	50%
Laboratory exercises	Written credit	50%

<b>Activities</b>	<b>Credit conditions</b>
Lecture	Final exam is in the form of a single-choice test. The test consists of 40 questions with 4 proposed answers, covering the content of lectures and practicals. The student must obtain a minimum of 25 points from the test to pass the test.
Laboratory exercises	Practical effects are verified during clinical classes on the basis of correctly performed veterinary activities under the supervision of the teacher. The correct performance of the activity is recorded as completed. The condition of joining the theoretical final credit is obtaining confirmation of the correct performance of the required practical activities (minimum two).

## Literature

### Obligatory

1. 1. England G. Heimendahl A.; BSAVA Manual of canine and feline reproduction and neonatology. England Gary, 2014 rok
2. 2. Skrzypczak W., Stefaniak T., Zabielski R. Newborns physiology with elements of pathophysiology. PWRiL, Warszawa 2011, 326 str.

### Optional

1. 1. Mosenthin R., Zentek J., Żebrowska T.(ed.): Biology of Nutrition in Growing Animals. Elsevier, Edinburgh, London, New York, Oxford, Philadelphia, St. Louis, Sydney, Toronto 2006
2. Current scientific and popular science literature

## Calculation of ECTS points

<b>Activity form</b>	<b>Activity hours*</b>
Lecture	15
Laboratory exercises	15
Preparation for the exam	30
<b>Student workload</b>	<b>Hours</b> 60
<b>Number of ECTS points</b>	<b>ECTS</b> 2

\* hour means 45 minutes

## Effects

Code	Content
KS.1	Absolwent jest gotów do wykazywania odpowiedzialności za podejmowane decyzje wobec ludzi, zwierząt i środowiska przyrodniczego
KS.4	Absolwent jest gotów do korzystania z obiektywnych źródeł informacji
KS.5	Absolwent jest gotów do formułowania wniosków z własnych pomiarów lub obserwacji
KS.8	Absolwent jest gotów do pogłębiania wiedzy i doskonalenia umiejętności
KS.9	Absolwent jest gotów do komunikowania się ze współpracownikami i dzielenia się wiedzą
B.U1	Absolwent potrafi bezpiecznie i humanitarnie postępować ze zwierzętami oraz instruować innych w tym zakresie
B.U3	Absolwent potrafi przeprowadzać pełne badanie kliniczne zwierzęcia
B.U13	Absolwent potrafi dobierać i stosować właściwe leczenie
B.W1	Absolwent zna i rozumie zaburzenia na poziomie komórki, tkanki, narządu, układu i organizmu w przebiegu choroby
B.W3	Absolwent zna i rozumie przyczyny i objawy zmian anatomopatologicznych, zasady leczenia i zapobiegania w poszczególnych jednostkach chorobowych
B.W4	Absolwent zna i rozumie zasady postępowania diagnostycznego, z uwzględnieniem diagnostyki różnicowej, oraz postępowania terapeutycznego
B.W6	Absolwent zna i rozumie sposób postępowania z danymi klinicznymi i wynikami badań laboratoryjnych i dodatkowych