SZKOŁA GŁÓWNA GOSPODARSTWA WIEJSKIEGO

Breed-related disorders

Educational subject description sheet

Basic information

Field of study Veterinary Medicine	**Didactic cycle** 2024/25
Speciality -	**Subject code** WETFVMS_D.5200.04212.24
Organizational unit Faculty of Veterinary Medicine	**Lecture languages** english
Study level long-cycle	**Mandatory** Elective subjects
Study form full-time studies	**Block** Major subjects
Education profile General academic	**Disciplines** Veterinary medicine

Coordinator	Ilona Kaszak
Teacher	Ilona Kaszak

Period Semester 10	**Examination** Pass with grade **Activities and hours** Lecture: 15	**Number of ECTS points** 1

Goals

Code	Goal
C1	Program consists of multimedia presentations and interactive discussions on the most common breed-related disorders observed in small animals. The objective is to provide information about the proper differential diagnosis based on the history and clinical examination results. The course also provides a clear rationale for choosing the right diagnostic tests and treatments of diseases that can be communicated to the owner.

Entry requirements

Animal physiology modules 2, Animal pathophysiology, Clinical and laboratory diagnostics modules 2, Dog and cat diseases

Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
Knowledge – Student knows and understands:			
W1	which findings are clinically relevant identify the chief complaint, review medical history, and execute proper anamnesis	B.W4, B.W5, B.W6	Test (written or computer based)
Skills – Student can:			
U1	asses which findings are clinically relevant identify the chief complaint, review medical history, and execute proper anamnesis	B.U1, B.U2, B.U3	Test (written or computer based)
U2	select diagnostic and therapeutic procedure	B.U13, B.U2, B.U3, B.U6	Test (written or computer based)
U3	collect the material for additional diagnostic tests and interpret laboratory data	B.U13, B.U3, B.U6, B.U7	Test (written or computer based)
Social competences – Student is ready to:			
K1	think logically even when dealing with a lot of information gathered from the history and clinical examination	KS.4, KS.5	Test (written or computer based)

Study content

No.	Course content	Subject's learning outcomes	Activities
1.	- basic concepts of genetics with clinical application (1h) - clinical characteristics of a patient with a hereditary disease (1h) - the most common birth defects in dogs and cats (2h) - selected genetic disorders on the example of dog and cat breeds (2 h) - genetically determined drug hypersensitivity (1h) - the influence of the patient's breed and conformation on the course of anesthesia and pharmacological sedation (1h) - possibilities and principles of genetic testing in dogs and cats (1h) - genetic predisposition to diseases of selected organ systems in dogs and cats (2h) - analysis of clinical cases (1 h) - interactive assessment of learning outcomes (3h)	W1, U1, U2, U3, K1	Lecture

Course advanced

Activities	Methods of conducting classes
Lecture	Lecture, Discussion, Presentation

Activities	Examination method	Percentage
Lecture	Test (written or computer based)	100%

Activities	Credit conditions
Lecture	multiple choice test (5 questions ; one correct answer) the grade are as follows: 0- 2 points= 2 (fail) 3 points = 3 (satisactory) 4 points = 4 (good) 5 points = 5 (very good)

Literature

Obligatory

1. Gough A.: Differential diagnosis in Small Animal Medicine. Wiley Blackwell, 2013
2. Maddison J., H. Volk, B. Church: Clinical reasoning in small animal practice. Wiley Blackwell, 2015
3. Thompson M.”Small Animal Medical Differential Diagnosis: A book of lists”, 5th edition, 2007

Optional

1. Donner J, Anderson H, Davison S, Hughes AM, Bouirmane J, Lindqvist J, Lytle KM, Ganesan B, Ottka C, Ruotanen P, Kaukonen M, Forman OP, Fretwell N, Cole CA, Lohi H. Frequency and distribution of 152 genetic disease variants in over 100,000 mixed breed and purebred dogs. PLoS Genet. 2018 Apr 30;14(4):e1007361. doi: 10.1371/journal.pgen.1007361. Erratum in: PLoS Genet. 2019 Jan 18;15(1):e1007938. PMID: 29708978; PMCID: PMC5945203.
2. Soh PXY, Hsu WT, Khatkar MS, Williamson P. Evaluation of genetic diversity and management of disease in Border Collie dogs. Sci Rep. 2021 Mar 18;11(1):6243. doi: 10.1038/s41598-021-85262-x. PMID: 33737533; PMCID: PMC7973533.
3. Zierath S, Hughes AM, Fretwell N, Dibley M, Ekenstedt KJ. Frequency of five disease-causing genetic mutations in a large mixed-breed dog population (2011-2012). PLoS One. 2017 Nov 22;12(11):e0188543. doi: 10.1371/journal.pone.0188543. PMID: 29166669; PMCID: PMC5699815.
4. Shaffer LG, Geretschlaeger A, Ramirez CJ, Ballif BC, Carl C. Quality assurance checklist and additional considerations for canine clinical genetic testing laboratories: a follow-up to the published standards and guidelines. Hum Genet. 2019 May;138(5):501-508. doi: 10.1007/s00439-019-02013-9. Epub 2019 Apr 13. PMID: 30982136; PMCID: PMC6536464.
5. O'Neill DG, James H, Brodbelt DC, Church DB, Pegram C. Prevalence of commonly diagnosed disorders in UK dogs under primary veterinary care: results and applications. BMC Vet Res. 2021 Feb 17;17(1):69. doi: 10.1186/s12917-021-02775-3. PMID: 33593363; PMCID: PMC7888168.

Calculation of ECTS points

Activity form	Activity hours*
Lecture	15
Self-study on the content covered in class	15
Student workload	**Hours** 30
Number of ECTS points	**ECTS** 1

* hour means 45 minutes

Effects

Code	Content
KS.4	Absolwent jest gotów do korzystania z obiektywnych źródeł informacji
KS.5	Absolwent jest gotów do formułowania wniosków z własnych pomiarów lub obserwacji
B.U1	Absolwent potrafi bezpiecznie i humanitarnie postępować ze zwierzętami oraz instruować innych w tym zakresie
B.U2	Absolwent potrafi przeprowadzić wywiad lekarsko-weterynaryjny w celu uzyskania dokładnej informacji o pojedynczym zwierzęciu lub grupie zwierząt oraz jego lub ich środowisku bytowania
B.U3	Absolwent potrafi przeprowadzać pełne badanie kliniczne zwierzęcia
B.U6	Absolwent potrafi pobierać i zabezpieczać próbki do badań oraz wykonywać standardowe testy laboratoryjne, a także prawidłowo analizować i interpretować wyniki badań laboratoryjnych
B.U7	Absolwent potrafi stosować aparaturę diagnostyczną, w tym radiologiczną, ultrasonograficzną i endoskopową, zgodnie z jej przeznaczeniem i zasadami bezpieczeństwa dla zwierząt i ludzi oraz interpretować wyniki badań uzyskane po jej zastosowaniu
B.U13	Absolwent potrafi dobierać i stosować właściwe leczenie
B.W4	Absolwent zna i rozumie zasady postępowania diagnostycznego, z uwzględnieniem diagnostyki różnicowej, oraz postępowania terapeutycznego
B.W5	Absolwent zna i rozumie zasady przeprowadzania badania klinicznego i monitorowania stanu zdrowia zwierząt
B.W6	Absolwent zna i rozumie sposób postępowania z danymi klinicznymi i wynikami badań laboratoryjnych i dodatkowych