Differential diagnostics based on laboratory results
Educational subject description sheet

Basic information

Field of study Veterinary Medicine	**Didactic cycle** 2024/25
Speciality -	**Subject code** WETFVMS_D.5200K.01787.24
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	Marta Mendel

Teacher	Marta Mendel

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

Goals

Code	Goal
C1	The course student acquires advanced information in the field of veterinary laboratory diagnostics, including the knowledge of using the results of laboratory tests for differential diagnostics.
C2	Thef laboratory diagnostic approaches and interpretation of the results of laboratory tests in various disorders are presented to students.

Entry requirements

Animal physiology (1 and 2), Biochemistry (1 and 2), Veterinary pharmacology (1 and 2), Pathophysiology, Clinical and laboratory diagnostics (1 and 2)

Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
Knowledge – Student knows and understands:			
W1	the diagnostic algorithms used for differential diagnostic consideration	B.W4, B.W6	Case
W2	the importance of the results of laboratory tests	B.W6	Case
Skills – Student can:			
U1	analyse critically available literature	B.U20	Case
Social competences – Student is ready to:			
K1	use various sources of literature to analyse problems critically	KS.4, KS.5, KS.8	Case
K2	collaborate with specialists of various disciplines of veterinary medicine	KS.10, KS.11	Case

Study content

No.	Course content	Subject's learning outcomes	Activities
1.	General laboratory concepts; Interpretation of laboratory results in electrolytes disorder	W1, W2, U1, K1, K2	Lecture
2.	Interpretation of laboratory results in urinary disorders	W1, W2, U1, K1, K2	Lecture
3.	Interpretation of laboratory results in endocrine disorders.	W1, W2, U1, K1, K2	Lecture
4.	Interpretation of laboratory results in metabolic and lipid disorders. Interpretation of laboratory results in gastrointestinal, hepatic and pancreatic disorders.	W1, W2, U1, K1, K2	Lecture

Course advanced

Activities	Methods of conducting classes
Lecture	Lecture, Problem lecture, Case study, Discussion, Brainstorm, Problem solving, Teamwork, Individual work, Interpreting the results

Activities	Examination method	Percentage
Lecture	Case	100%

Activities	Credit conditions
Lecture	At the end of the course each student gets a study-case to interpret in a written form (max 5 points). The interpretation includes several exchanges of information with the teacher. To pass the task one must obtain at least 51% of total number of points (at least 3 out of 5 points). Failed case can be repeated. Grading scale: Number of points / Grade 0 – 2.5 / 2 (insufficient) 3 / 3 (sufficient) 3.5 / 3.5 (sufficient +) 4.0 / 4.0 (good) 4.5 / 4.5 (good +) 5.0 / 5.0 (very good) No extra assessment methods are anticipated. In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.

Literature

Obligatory

1. Small Animal Clinical Diagnosis by Laboratory Methods, 5e. MD Willard, H Tvedten, Elsevier, 2012
2. Veterinary Haematology and clinical chemistry. MA Thrall, G Weiser, RW Allison, TW Campbell. Wiley-Blackwell, 2012
3. Veterinary Clinical Diagnosis by Laboratory Methods. Brar R.S., Sandhu H.S., Singh A. Kalyani Publishers, 2018

Optional

1. LaborSkills Leitfaden Labordiagnostik fuer Hund und Katze. Schwendenwein I., Moritz A. Thieme, 2019
2. Laboratory Profiles of Small Animal Diseases: A Guide to Laboratory Diagnosis, 3rd Edtion, red. Charles H. Sodikoff, wyd. Mosby, 2001
3. Robbins and Cotran Pathologic Basis of Disease, 10th Edition, red. Vinay Kumar, Abul K. Abbas, Jon C. Aster, wyd. Elsievier, 2020
4. Clinical Biochemistry of Domestic Animals, red. J. Jerry Kaneko, John W. Harvey and Michael L. Bruss, wyd. Academic Press, 2008
5. Small Animal Medical Differential Diagnosis, red. Mark S. Thompson, wyd. Saunders, 2014

Calculation of ECTS points

Activity form	Activity hours*
Lecture	15
Preparing the project	10
Conducting literature research	5
Student workload	**Hours** 30
Number of ECTS points	**ECTS** 1

* hour means 45 minutes

Effects

Code	Content
KS.4	label.effect.prefix.competenceAbsolwent jest gotów do korzystania z obiektywnych źródeł informacji
KS.5	label.effect.prefix.competenceAbsolwent jest gotów do formułowania wniosków z własnych pomiarów lub obserwacji
KS.8	label.effect.prefix.competenceAbsolwent jest gotów do pogłębiania wiedzy i doskonalenia umiejętności
KS.10	label.effect.prefix.competenceAbsolwent jest gotów do działania w warunkach niepewności i stresu
KS.11	label.effect.prefix.competenceAbsolwent jest gotów do współpracy z przedstawicielami innych zawodów w zakresie ochrony zdrowia publicznego
B.U20	label.effect.prefix.skillAbsolwent potrafi korzystać ze zgromadzonych informacji związanych ze zdrowiem i dobrostanem zwierząt, a w wybranych przypadkach również z produkcyjnością stada
B.W4	label.effect.prefix.knowledgeAbsolwent zna i rozumie zasady postępowania diagnostycznego, z uwzględnieniem diagnostyki różnicowej, oraz postępowania terapeutycznego
B.W6	label.effect.prefix.knowledgeAbsolwent zna i rozumie sposób postępowania z danymi klinicznymi i wynikami badań laboratoryjnych i dodatkowych