



SZKOŁA GŁÓWNA  
GOSPODARSTWA  
WIEJSKIEGO

## Ultrasound diagnostics in companion animals

### Educational subject description sheet

#### Basic information

|  |   |
|--|---|
| <b>Field of study</b><br>Veterinary Medicine                 | <b>Didactic cycle</b><br>2023/24                        |
| <b>Speciality</b><br>-                                       | <b>Subject code</b><br>WETFVMS_D.5400K.633d37ecd7825.23 |
| <b>Organizational unit</b><br>Faculty of Veterinary Medicine | <b>Lecture languages</b><br>english                     |
| <b>Study level</b><br>long-cycle                             | <b>Mandatory</b><br>Elective subjects                   |
| <b>Study form</b><br>full-time studies                       | <b>Block</b><br>Major subjects                          |
| <b>Education profile</b><br>General academic                 | <b>Disciplines</b><br>Veterinary medicine               |
| <b>Coordinator</b>   | Sławomir Giziński                                       |
| <b>Teacher</b>   | Sławomir Giziński                                       |
| <b>Period</b><br>Semester 11                                 | <b>Examination</b><br>Pass with grade                   |
|  | <b>Activities and hours</b><br>Laboratory exercises: 15 |
|  | <b>Number of ECTS points</b><br>1                       |

#### Goals

| Code | Goal   |
|------|--|
| C1   | The aim of the course is to present the basis of practical knowledge about various methods of ultrasound examination of animals. |

## Subject's learning outcomes

| Code  | Outcomes in terms of   | Effects                            | Examination methods                           |
|---|--|------------------------------------|---|
| <b>Knowledge - Student knows and understands:</b> |  |                                    |   |
| W1  | how to use USG machines, goals of the USG examination in pets and horses, principles of most common examination technique (transrectal, transabdominal using various types of probes). | B.W3, B.W4, B.W5                   | Report, Assessment of activity during classes |
| <b>Skills - Student can:</b>                      |  |                                    |   |
| U1  | use ultrasound diagnostic methods used in small animals.   | B.U3, B.U7                         | Report, Assessment of activity during classes |
| <b>Social competences - Student is ready to:</b>  |  |                                    |   |
| K1  | able to work in a team, makes a diagnosis independently, good communication with the animal owner/keeper, independently makes clinical diagnosis.                                      | KS.1, KS.2, KS.4, KS.5, KS.8, KS.9 | Report, Assessment of activity during classes |

## Study content

| No. | Course content  | Subject's learning outcomes | Activities           |
|-----|---|-----------------------------|----------------------|
| 1.  | During the course students obtain basic knowledge about various method of ultrasound examination in companion animals as dogs, cats, horses and exotic pets. Students will work in a team during classes. During the classes, films, presentations, preparations, equipment and examinations will be presented. Selected clinical cases will be analysed. | W1, U1, K1                  | Laboratory exercises |

## Course advanced

| Activities           | Methods of conducting classes   |
|----------------------|---|
| Laboratory exercises | Lecture, Conversation lecture, Case study, Discussion, Presentation, Problem method, Teamwork |

| Activities           | Examination method                    | Percentage |
|----------------------|---------------------------------------|------------|
| Laboratory exercises | Report                                | 50%        |
| Laboratory exercises | Assessment of activity during classes | 50%        |

| Activities           | Credit conditions   |
|----------------------|---|
| Laboratory exercises | <p>The basis for completing the course is the presence and active participation in the implementation of the curriculum, the correct implementation of all the procedures presented. Case report has to be completed by each student. 20% of absence is allowed in accordance with the study regulations. In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods might be adopted.</p> <p>To verify the learning outcomes:</p> <ol style="list-style-type: none"> <li>1. attendance at exercises 50%</li> <li>2. case report 50%</li> </ol> |

## Literature

### Obligatory

1. Small Animal Diagnostic Ultrasound 3th edition. J.S Matoon, T.G Nayland. Elsevier 2015.
2. Equine Diagnostic Ultrasound. V.B Reef . Saunders 1998.
3. Atlas of equine ultrasonography. J.A. Kidd, K.G. Lu, M. L. Frazer. Wiley Blackwell 2014.

### Optional

1. Diagnostic Imaging of Exotic Pets: Birds, Small Mammals, Reptiles. M.E. Krautwald-Junghanns, M. Pees, S. Reese, T. Tully. Schluetersche 2010.
2. Diagnostic Radiology and Ultrasonography of the Dog and Cat, 5th Edition. J.K. Kealy, H. McAllister, J.P. Graham, Elsevier 2010.

## Calculation of ECTS points

| Activity form                | Activity hours*    |
|------------------------------|--------------------|
| Laboratory exercises         | 15                 |
| Preparation of the report    | 15                 |
|                              |                    |
| <b>Student workload</b>      | <b>Hours</b><br>30 |
| <b>Number of ECTS points</b> | <b>ECTS</b><br>1   |

\* 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.2 | Absolwent jest gotów do prezentowania postawy zgodnej z zasadami etycznymi i podejmowania działań w oparciu o kodeks etyki w praktyce zawodowej oraz do wykazywania tolerancji dla postaw i zachowań wynikających z odmiennych uwarunkowań społecznych i kulturowych |
| 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.U3 | Absolwent potrafi przeprowadzać pełne badanie kliniczne zwierzęcia   |
| 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.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.W5 | Absolwent zna i rozumie zasady przeprowadzania badania klinicznego i monitorowania stanu zdrowia zwierząt  |