



## Veterinary ultrasonography

ECTS: 2.00

### SUBJECT MATTER CONTENT

#### CLASSES

Practical classes on performing ultrasound examinations in dogs, cats, cattle, horses and small ruminants. Classes conducted with the use of various types of ultrasound scanners and ultrasound probes. Ultrasound examination of the abdominal and thoracic cavities in pets, ultrasound examination of ovaries, uterus, mammary gland in cattle, ultrasound examination of ligaments, eyeball, liver in horses, pregnancy detection and abdominal ultrasound diagnostics in small ruminants.

#### LECTURE

Basic definitions in ultrasonography, rules of ultrasound examination, characteristics of the equipment. Possibilities of using ultrasound examination in different animal species.

#### TEACHING OBJECTIVE

The educational outcome is to familiarize students and broaden their knowledge of ultrasound techniques used in farm animals and pets

#### 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.+ , A.W10. + , A.U14. + , B.W5. ++ , B.W9. + , K.10.+ , B.W3. + , K.11.+ , B.U1. + , A.U13. + , K.4.+ , B.W6. + , B.W4. ++ , C.W3. + , B.U7. + , K.7.+ , K.9.+ , A.W11. + , A.U12. +

#### LEARNING OUTCOMES:

##### Knowledge:

W1 – The student knows the causes and symptoms of pathological changes, treatment and prevention protocols of selected animal diseases in course of which diagnosis with ultrasonography techniques can be used. The student knows the principles and mechanisms underlying animal health and disease development.

W2 – The student knows the principles and application of ultrasound examination in various animal species

W3 – The student knows the rules of safe ultrasound examination and proper preparation of the animal for the procedure

##### Skills:

U1 – The student uses ultrasound equipment in accordance with its intended use and safety rules for animals and humans

#### 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:** 6/11

**Types of classes:** Lecture, Classes

**Number of hours in**

**semester:** Lecture: 10.00, Classes: 20.00

**Language of instruction:** Polish

**Introductory subject:** Internal diseases of farm animals, Feline and canine internal medicine, Infectious diseases of farm animals, Feline and canine infectious diseases, Reproduction of farm animals, Feline and canine reproduction, Clinical and laboratory diagnostics

**Prerequisites:** Knowledge of the pathogenesis, diagnosis and treatment of animal diseases

**Name of the organisational unit conducting the course:** Katedra Chorób Wewnętrznych z Kliniką

**Person responsible for the**

**realization of the course:** prof. dr hab.

wet. Przemysław Sobiech

**e-mail:** psobiech@uwm.edu.pl

**Additional remarks:**

U2 – The student is able to clearly present and describe the results of the ultrasound examination.

**Social competence:**

K1 –

K2 –

**TEACHING FORMS AND METHODS:**

Lecture(W1;W2;W3;K1;K2;):multimedia presentation, discussion

Classes(W1;W2;W3;U1;U2;K1;K2;):multimedia presentation, discussion, ultrasound examination

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

Lecture (Colloquium test) - Student must obtain a positive grade for each of the received exam questions. The final grade is issued on the basis of the arithmetic mean value of the grades obtained for each question. The student may take the exam twice. In the event of a top-down suspension of classes and the need for online education, the methods of verifying the achievement of educational outcomes declared in the syllabus, i.e. the forms of passing the exam and classes, may change in a manner appropriate to the situation -

Classes (Colloquium practical) - There is 1 practical test per semester. In order to pass the test, at least 65% of the assigned activities must be correctly completed. The grading is based on the score thresholds described in the faculty procedure "Principles of grading students". In the event of a top-down suspension of classes and the need for online education, the methods of verifying the achievement of educational outcomes declared in the syllabus, i.e. the forms of passing the exam and classes, may change in a manner appropriate to the situation -

**BASIC LITERATURE:**

1. Paddy Mannion, *Diagnostyka ultrasonograficzna małych zwierząt pod redakcją Paddy Mannion – wydanie polskie pod redakcją W. Atamaniuka*, Wyd. Triangulum, R. 2008
2. Ivo Grygar, Eduard Kudlac, *Ultrasonografia w położnictwie i ginekologii weterynaryjnej*, Wyd. Platan, R. 2004

**SUPPLEMENTARY LITERATURE:**

