



## Reproduction and obstetrics of farm animals II

ECTS: 3.00

### SUBJECT MATTER CONTENT

#### LECTURE

The general purpose of the lectures is to familiarize students with the anatomy and physiology of the mammary gland, risk factors leading to mastitis, and the pathogens causing them, and the function of the immune system in the mammary gland. The clinical picture of the various types of inflammation is mentioned (subclinical, clinical, chronic), the methods of therapy and the prevention of these diseases, taking into account the changing legal provisions. They will learn how to develop programs to reduce the presence of mastitis in herds depending on the micro-organism causing them.

#### PRACTICAL CLASSES

During the labs, students are familiar with the clinical trial and are exchanging milk samples for bacteriological tests, methods of administration of the intramammary medicines (cows), with the construction of milking machines and milk collection systems, the effect of the mechanical milking on the occurrence of inflammation is mentioned. Students will learn the surgical methods used to develop the wound of the syringe and list (isolated organs) and how to prepare cows for surgical procedures for listing. They also learn the causes, diagnosis and treatment of the diseases in small ruminants (goats, sheep) and pigs.

#### AUDITORIUM CLASSES

During the labs, students are familiar with the clinical trial and are exchanging milk samples for bacteriological tests, methods of administration of the intramammary medicines

#### TEACHING OBJECTIVE

The purpose of this training is to provide students with theoretical knowledge and practical skills in the field physiology and pathology of the mammary gland of farmed animals (cattle, small ruminants, pigs)

#### 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. + , A.W12. + , B.U14. + , A.W13. + , A.W15. + , A.U11. + , B.W9. + , K.10.+ , B.W2. + , B.W1. + , K.2.+ , A.W1. + , B.W5. + , B.U19. + , A.W17. + , B.U6. + , B.U3. + , A.W18. + , B.W6. + , K.5+ , B.U2. + , B.U10. + , B.U13. + , A.W11. + , A.U12. + , B.W4. + , A.U21. +

#### LEARNING OUTCOMES:

**Legal acts specifying learning outcomes:**  
**682/2020**  
**Disciplines:** Veterinary science  
**Status of the course:**Obligatoryjny  
**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:** 4/8

**Types of classes:** Lecture, Practical classes, Auditorium classes  
**Number of hours in semester:**Lecture: 20.00, Practical classes: 8.00, Auditorium classes: 12.00  
**Language of instruction:**Polish  
**Introductory subject:** anatomy, physiology , husbandry, pathophysiology, clinical diagnosis  
**Prerequisites:** knowledge of anatomy, histology, physiology and animal husbandry, ability to conduct a clinical examination of animals

**Name of the organisational unit conducting the course:**Katedra Rozrodu Zwierząt z Kliniką  
**Person responsible for the realization of the course:**dr hab. wet. Wojciech Barański, prof. UWM  
**e-mail:** wojbar@uwm.edu.pl

**Additional remarks:**

**Knowledge:**

W1 – After completing the class, the student can define and discuss the construction and function of the mammary gland, taking into account the specific species characteristics. The student is familiar with the methods for diagnosing mammary gland diseases in cattle, small ruminants and pigs and has developed preventive programs to reduce the occurrence of mastitis.

**Skills:**

U1 – The student shall be able to diagnose and treat mammary gland diseases in cattle, small ruminants and pigs after the course, taking into account the correct sampling of milk for microbiological testing. The student can prepare the animal for surgical treatment of breast and breast injuries and perform procedures within the organ.

**Social competence:**

K1 – The student follows the principles of veterinary deontology and observes the principles of animal welfare. Demonstrates the ability to work with animal owners and state veterinary inspection, to advise and discuss current veterinary and economic aspects of mammary gland diseases.

**TEACHING FORMS AND METHODS:**

Lecture(W1;U1;K1;):Multimedial presentation

Practical classes(W1;U1;K1;):Multimedia presentations using case reports.

Auditorium classes(W1;U1;K1;):Work on live animals and isolated mammary glands.

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

Lecture (Written exam) - Written examination - the written examination shall cover knowledge of the subjects presented during the two-semester lectures on the duration of the work of the labor market and the obstetrics of livestock I and II. To pass the final exam, you must pass a pass assessment of each exam question you receive. The final assessment of the examination shall be based on the arithmetic mean value of the assessments obtained from the individual questions. A student can retake the exam twice. If the classroom is suspended and remote learning is required, the method is declared in the syllabus the verification of learning outcomes, so the exam and exercise passing patterns may change in a way that is appropriate to the situation. -

Lecture (Exam) - The skills based exam covers gynecology, obstetrics, and disease topics that students learn and perform during the two semester of the subject and the animal housing I and II. In order to pass the skill test, you must pass a pass assessment on each of the exam questions you have received. The final assessment of the examination shall be based on the arithmetic mean value of the assessments obtained from the individual questions. A student can make two improvements exam. If the classroom is suspended from the top and the need for teaching is required remote methods, as declared in the syllabus, to verify learning outcomes, so the forms of passing an exam and exercise can change in a way that is appropriate to the situation. -

Practical classes (Colloquium test) - The semester is taking place of 1 colokwium in writing. Score from the colloquium shall be displayed on the base the arithmetic mean value of the assessments from individual questions. Student it can double up to improvement coloxum. To be credited the final exercise is to obtain pass judgment. Absence of colocoum it is equivalent to obtaining insufficient final assessment of the exercise. For the upper suspension to complete classroom and classroom sessions the need for remote learning declared in the syllabus of the verification method achieving learning outcomes, and hence form passing the exam and activities may be subject to conditions change in a way that is appropriate to the situation. -

Auditorium classes (Colloquium test) - The semester is taking place of 1 colokwium in writing. Score from the colloquium shall be displayed on the base the arithmetic mean value of the assessments from individual questions. Student it can double up to improvement coloxum. To be credited the final exercise is to obtain pass judgment. Absence of colocoum it is equivalent to obtaining insufficient final assessment of the exercise. For the upper suspension to complete classroom and classroom sessions the need for remote learning declared in the syllabus of the verification method achieving learning outcomes, and hence form passing the exam and activities may be subject to conditions change in a way that is appropriate to the situation. -

**BASIC LITERATURE:**

1. Boryczko Z, Bostedt H., Jaśkowski M.J., *Fizjologia i patologia rozrodu bydła*, Tom 1,2, Wyd. Wydawnictw Naukowe Uniwersytetu Mikołaja Kopernika, R. 2021

**SUPPLEMENTARY LITERATURE:**

1. Bednarski Michał, *Choroby bydła podstawy diagnostyki i terapii*, Wyd. apra-wetpress-Lecznica dużych zwierząt, R. 2013

