



## Infectious diseases of horses

ECTS: 2.00

### SUBJECT MATTER CONTENT

#### LECTURE

Infectious diseases of skin and musculoskeletal system – etiopathogenesis, epidemiology and control (ulcerative lymphangitis, epizootic lymphangitis, dermatophylosis, horse pox, joint infections, abscesses, clostridial infections). Skin and systemic mycoses (trichophytosis, microsporosis, sporotrichosis, mycoma, fibromycosis, candidosis). Infectious diseases of nervous system – etiopathogenesis, epidemiology and control (Borna disease, viral encephalomyelitis – WEE, EEE, VEE, WNfF, JBE, SLE, MVE, FSME), rabies, Aujeszky's disease, botulism, EHV-1 infection). Infectious diseases transmitted by arthropods – etiopathogenesis, epidemiology and control (African horse sickness, West Nile fever, borreliosis, ehrlichiosis, vesicular stomatitis, Q fever). Prophylaxis of infectious diseases of horses (non-specific prophylaxis in stud farms, immunomodulators, vaccine types, vaccination programs).,CLASSES AUDYTORYJNE:Diagnosics, prevention and therapy of infectious diseases of foals (enzootic bronchopneumonia, rhodococcosis, actinobacillosis, joint infections, salmonellosis, streptococcosis, colibacteriosis, pneumococcosis, pyobacillosis, Tyzzer's disease, Cl. perfringens A, B, C infections, rota-, corona-, adenoviral infections). Diseases cause reproductive disorders (equine rhinopneumonitis - EHV-1 and 4), EHV-3 infection, equine viral arteritis, contagious equine metritis, leptospirosis, salmonellosis, non-specific abortions caused by Streptococcus, Actinobacillus, Pseudomonas aeruginosa, E. coli). Differentiation of infectious diseases of respiratory tract (equine rhinopneumonitis – EHV-4, equine influenza, influenza-like infections - PI-3, rhino-, reo-, picorna-, adeno-, EHV-2, tuberculosis). Tetanus, strangles, equine sarcoids - diagnosis, treatment, prevention. Equine infectious anaemia - diagnosis and eradication. Specific immunoprophylaxis of infectious diseases of horses. Glanders and meloidosis – diagnosis, eradication.,CLASSES PRAKTYCZNE:Laboratory diagnosis of selected infectious diseases of horses. Horse clinical examination, development of equine specific immunoprophylaxis programs, equine vaccination.

#### TEACHING OBJECTIVE

The objective of education is an acquisition by the student theoretical knowledge in the area of causes and mechanisms of formation and transmission of the infectious diseases of horses, as well as practical skills regarding recognition, differentiation, treatment, prevention and control of infectious diseases of horses.

**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+++

**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:** 5/9

**Types of classes:** Lecture, Classes, Practical classes  
**Number of hours in semester:**Lecture: 10.00, Classes: 17.00, Practical classes: 3.00  
**Language of instruction:**Polish  
**Introductory subject:** Microbiology, Immunology, Pharmacology, Pathophysiology, Pathomorphology, Veterinary epidemiology  
**Prerequisites:** Knowledge bases of molecular techniques.

**Name of the organisational unit conducting the course:**Katedra Epizootiologii  
**Person responsible for the realization of the course:**prof. dr hab. wet. Agata Banczerz-Kisiel  
**e-mail:** a.banczerz-kisiel@uwm.edu.pl

**Additional remarks:** Field, practical and laboratory exercises in small groups.

## **Symbols for outcomes related to the field of study:**

K.1.+ , B.U8. + , A.W10. + , K.8.+ , A.W13. + , B.W2. + , K.11.+ , B.W3. + , B.W1. + , B.W5. + , B.U19. + , B.U21. + , A.W17. + , B.U6. + , B.U3. + , B.W6. + , B.U20. + , B.U2. + , B.U13. + , B.W4. + , B.W8. +

## **LEARNING OUTCOMES:**

### **Knowledge:**

W1 – Student describes and interprets: the biology of infectious agents of horses causing diseases transmitted between animals and anthroposoones, including the disease transmission mechanisms and the body's defense mechanisms, disorders at the level of the cell, tissue, organ, system and organism in the course of the disease, mechanisms of organ and systemic pathologies, causes and symptoms of pathological changes, principles of treatment and prevention in individual diseases of horses, principles of diagnostic procedures, including differential diagnosis, and therapeutic procedures, principles of clinical examination and monitoring of the health condition of individual horses and diseases occurring in the stud, handling of clinical data and results laboratory and additional tests, procedure in case of suspicion or confirmation of diseases subject to compulsory control or registration of horses.

### **Skills:**

U1 – Student carries out a veterinary interview in order to obtain accurate information about the health condition of a single horse or in a stud and its or their living environment, conduct a full clinical examination of a horse, collect and preserve samples for research and perform standard laboratory tests, as well as correctly analyze and interpret the results of laboratory tests, implement appropriate procedures when a disease that is subject to compulsory eradication or registration is identified, select and apply appropriate treatment of horses, conduct an epizootic investigation to establish the period during which an infectious animal disease may have developed on the farm before its occurrence is suspected or confirmed, the place of origin of the source of an infectious disease of animals along with the determination of other farms and the routes of movement of people, animals and objects that may have been the cause of the spread of an infectious disease to or from the farm, use the information collected ation related to animal health and welfare, and in selected cases also to herd productivity, to develop and implement preventive programs appropriate for individual animal species.

### **Social competence:**

K1 – Student demonstrates responsibility for decisions taken towards humans and animals; is able to critically assess their own and other people's actions and improve the proposed solutions; puts the welfare of the patient in the first place.

## **TEACHING FORMS AND METHODS:**

Lecture(W1;U1;K1;):Lecture - with a multimedia presentation, films.

Practical classes(W1;U1;K1;):Field exercises - clinical trials, development of a specific immunoprophylaxis program, vaccinations. Laboratory exercises - laboratory diagnosis of selected horse diseases.

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

Lecture (Colloquium test) - Credit in the field of contagious diseases of horses discussed during lectures and exercises. There is one written test per semester. To pass the test, you must obtain at least 65% of the possible points. The grading of grades is based on the score thresholds described in the faculty procedure "Principles of grading students". The student may attempt to correct the test twice. In the event of a top-down suspension of classroom classes and the need for distance learning, the methods of verifying the achievement of learning outcomes declared in the syllabus, i.e. the forms of passing the exam and exercises, may change in a manner appropriate to the situation. -

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learning outcomes declared in the syllabus, i.e. the forms of passing the exam and exercises, may change in a manner appropriate to the situation. -

Practical classes (Evaluation of the work and cooperation in the group) - Independent performance of laboratory tests. Epidemiological analysis and evaluation of the animal's health condition, followed by independent development and proposing of a vaccination program. Performing specific immunoprophylaxis in accordance with the stud program. -

#### **BASIC LITERATURE:**

1. Dietz O., Huskamp B, *Praktyka kliniczna: Konie.*, Wyd. Galaktyka, R. 2008, s.
2. Sellon D. C., Long M. T, *Equine infectious diseases*, Wyd. Saunders, R. 2000, s.
3. Gliński Zdzisław, Kostro Krzysztof, *Choroby zakaźne zwierząt z elementami epidemiologii i zoonoz*, Wyd. PWRiL, R. 2011, s.
4. Sameeh M.A., Sellon D.C., Long M., *Equine Infectious Diseases*, Wyd. Saunders Elsevier, R. 2007, s.
5. Pavord T., Pavord M., *Choroby koni. Weterynaria praktyczna*, Wyd. Akademia Jeździecka, R. 2013, s.
6. Mair T. (ed.), *Infectious Diseases of the Horse*, Wyd. Publisher: EVJ Ltd, R. 2009, s.

#### **SUPPLEMENTARY LITERATURE:**

1. Sikora J., *Choroby układu oddechowego koni*, Wyd. SI-MA, R. 2009, s.
2. Knottenbelt D.C., Pascoe R.R.W., *Color atlas of diseases and disorders of the horse*, Wyd. Wolfe Publ., R. 1994, s.
3. Kita J., Oyrzanowska J., Dziąba K., *Metody zwalczania chorób zaraźliwych zwierząt gospodarskich. Ćwiczenia z epizootiologii.*, Wyd. PWN, R. 1987, s.

