

# **Technologies in animal production**

ECTS: 2.00

### SUBJECT MATTER CONTENT

#### LECTURE

Students will learn about: technologies in poultry production (turkeys, laying hens, broiler chickens, waterfowl and ostriches). World pork production and pig farming, the position of the Polish pork industry. Pig farming structure in Poland. Pig production traits. Large-scale (commercial) and small-scale (smallholder) pig farming. Technology and management schemes for different groups of pigs. Technologies in dairy cattle and beef cattle breeding. Calf rearing systems. Technopathies in cattle production. Good Hygiene Practices, epizootic disease control and prevention on animal farms.

#### PRACTICAL CLASSES

Field classes at a turkey and ostrich farm. Field classes on a pig farm. Field classes on a cattle farm.

#### AUDITORIUM CLASSES

Overview and presentation of equipment in poultry facilities of turkeys, chickens, broiler chickens, waterfowl and ostriches. Discussion and presentation of pig keeping technology - basic herd, breeding sector, farrowing houses, systems of rearing piglets, weaners and finishers. Pig keeping technologies depending on manure removal and feeding. Overview and presentation of the principles of cattle breeding, classification and types of barns, farm buildings in a cattle farm. Cattle identification. Milking systems, milking robots. The influence of housing systems on cow health.

#### **TEACHING OBJECTIVE**

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.+, B.U1. +, B.U20. +, B.W9. +, K.5+, B.W20. +, K.4.+, B.W11. +, K.8.+, B.W15. +

LEARNING OUTCOMES: Knowledge: 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: 2/3

Types of classes: Lecture, Practical classes, Auditorium classes Number of hours in semester:Lecture: 15.00, Practical classes: 4.00, Auditorium classes: 11.00 Language of instruction:Polish Introductory subject: Prerequisites:

Name of the organisational unit conducting the course:Katedra Prewencji Weterynaryjnej i Higieny Pasz

Person responsible for the realization of the course:dr hab. wet. Łukasz Zielonka, prof. UWM e-mail: lukasz.zielonka@uwm.edu.pl

Additional remarks: The implementation of field activities

depends on the epizootic and epidemiological situation in the country. If it is impossible to carry out field classes, it is allowed to conduct classes in the form of an auditorium instead. W1- The students will acquire knowledge of various technologies utilize in animal production. They will know the differences in the technology of small-scale farming and industrial-scale farming

W2 – The student will have knowledge of the following: - welfare rules that must be met in relation to various species and technological groups of animals in industrial breeding technologies; - Principles of operation of specialized farms of various species of livestock.

W3 – The student will have knowledge of the proper management and disposal of byproducts and waste related to animal production.

### Skills:

U1 – Students will be able to select technological solutions ensuring the welfare of various animal species in industrial production. They will prepare for the role of breeders' advisor in the selection of appropriate technological solutions in the maintenance of individual species and age groups of animals.

### Social competence:

K1 – Students will acquire skills and competences in: - understanding the organization of large-scale animal production, - understanding technological risks in the formation and prevention of technopathies, - application of legal provisions on animal production, including welfare, - the ability to advise a breeder in preparing an object to meet veterinary conditions, for plant approval by the competent institution.

## TEACHING FORMS AND METHODS:

Lecture(W1;W2;W3;):Partial assessment of the material (poultry, cattle, pigs) realized during the course combined with a test from practical classes material.

Practical classes(W2;U1;K1;):Partial assessment of the material (poultry, cattle, pigs) realized during the course.

Auditorium classes(U1;K1;):Partial assessment of the material (poultry, cattle, pigs) realized during the course combined with a test from practical classes material.

## FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Lecture (Colloquium test) - Partial assessment of the material (poultry, cattle, pigs) realized during the course. There are 3 written tests per semester. To pass the test, the student must obtain at least 65% of the possible points. The point thresholds for individual grades are described in the faculty procedure "Principles of grading students". The student may attempt to correct the test twice. The condition for receiving a final pass from the exercises is to obtain positive grades from all tests taking place in the course of the classes. In case of passing all the tests, the final grade for the exercises is issued on the basis of the arithmetic mean value of all the grades obtained in the tests. Failure to pass any of the tests is tantamount to obtaining an unsatisfactory final grade from classes. In case of suspension of stationary classes, it is allowed to pass the online test in the form of a test. -

Practical classes (Colloquium test) - Partial assessment of the material (poultry, cattle, pigs) realized during the course. There are 3 written tests per semester. To pass the test, the student must obtain at least 65% of the possible points. The point thresholds for individual grades are described in the faculty procedure "Principles of grading students". The student may attempt to correct the test twice. The condition for receiving a final pass from the exercises is to obtain positive grades from all tests taking place in the course of the classes. In case of passing all the tests, the final grade for the exercises is issued on the basis of the arithmetic mean value of all the grades obtained in the tests. Failure to pass any of the tests is tantamount to obtaining an unsatisfactory final grade from classes. In case of suspension of stationary classes, it is allowed to pass the online test in the form of a test. -

Auditorium classes (Colloquium test) - Partial assessment of the material (poultry, cattle, pigs) realized during the course combined with a test from practical classes material. -

### **BASIC LITERATURE:**

1. praca zbiorowa pod redakcją Michała Mazurkiewicza, *Choroby drobiu*, Wyd. Wrocław, R. 2005

2. red. Y.M. Saif, Diseases of Poultry, Wyd. Iowa State Press, R. 2003

3. Pod redakcją Henryka Grodzkiego, *Hodowla i użytkowanie zwierząt gospodarskich*,

Wyd. Wydawnictwo SGGW, R. 2005

4. Zygmunt Pejsak, Ochrona zdrowia świń, Wyd. Polskie Wydawnictwo Rolnicze, R. 2007

5. Pod Redakcją Barbary Grudniewskiej, *Hodowla i użytkowanie świń*, Wyd. Wydawnictwo ART, R. 11994

### SUPPLEMENTARY LITERATURE:

- 1. Czasopismo, Magazyn Weteynaryjny, Wyd., R. 0000
- 2. Czasopismo, Polskie Drobiarstwo, Wyd., R. 0000
- 3. Czasopismo, Trzoda Chlewna, Wyd., R. 0000
- 4. Czaoposmo, Bydło, Wyd., R. 0000

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