

**Course syllabus – part A****Animal Hygiene, Disease Prevention and Animal Welfare I****02S10-HPDZI****ECTS: 3.00****CYCLE: 2024L****SUBJECT MATTER CONTENT****LECTURE**

Animal hygiene (zoohygiene) as a significant aspect of animal welfare. Comfort indices. Factors affecting microclimate in farm buildings and their effect on animal welfare and environment. Heat stress indices. Pollutant sources. Optimization of living conditions for farm animals. Air exchange and distribution.

CLASSES

Assessment methods and indicators of animal welfare and environmental conditions in animal buildings. Measurements of microclimatic parameters and analyses of dust, microbial and gaseous contaminations of air. Thermal insulation standards and the assessment of the ventilation efficacy in livestock buildings. Principles of animal welfare control – preparation of protocol complying with the minimum legal requirements.

TEACHING OBJECTIVE

The student will have a comprehensive theoretical and practical knowledge regarding animal welfare and criteria of its evaluation, with particular reference to the interactions between animal hygiene, environment, welfare and behaviour as well as animal origin products quality. The student will also have knowledge and skills in methodologies of zoohygienic measurements and summary assessment of microclimate and animal welfare.

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/ZRA_P6S_WG++, R/ZRA_P6S_KK++, InzA_P6S_WG+, InzA_P6S_UW+++, R/ZRA_P6S_KR+, R/ZRA_P6S_KO+, R/ZRA_P6S_UW++

Symbols for outcomes related to the field of study:

KA6_KR1+, KA6_UW9+, InzA_P6S_WG1+, KA6_WG10+, KA6_UW1+, InzA_P6S_UW4+, KA6_WG11+, KA6_KK1+, InzA_P6S_UW5+, InzA_P6S_UW2+, KA6_KO2+, KA6_KK2+

LEARNING OUTCOMES:**Knowledge:**

- W1 – has basic knowledge of zoohygiene, zootechnical prophylaxis and animal welfare
- W2 – knows the methods of assessing animal welfare conditions and levels of welfare
- W3 – knows the basics of operation and use of basic microclimate measurement devices

Skills:

- U1 – can use the devices for basic microclimate measuring
- U2 – can assess the environmental conditions and the level of animal welfare

Legal acts specifying learning outcomes:**460/2019****Disciplines:** animal science and fisheries**Status of the course:** mandatory**Group of courses:** B - major-specific courses**Code:** ISCED 0811**Field of study:** Animal Science**Scope of education:** Animal Breeding and Management, Horse

Rehabilitation and Injury Prevention, Keeping and Breeding Companion Animals

Profile of education: General academic**Form of studies:** full-time**Level of studies:** first degree studies**Year/semester:** 3/6**Types of classes:** Lecture, Classes, Practical classes**Number of hours in****semester:** Lecture: 15.00, Classes: 21.00, Practical classes: 9.00**Language of instruction:** Polish**Introductory subject:** animal breeding and rearing**Prerequisites:** basic knowledge of animal physiology and biochemistry, elements of biophysics**Name of the organisational unit conducting the course:** Department of Animal Welfare and Research**Person responsible for the realization of the course:** prof. dr hab. wet. Dorota Witkowska**e-mail:** dorota.witkowska@uwm.edu.pl**Additional remarks:** -

U3 – considers the advantages and disadvantages of prevailing animal welfare systems and their impact on well-being

Social competence:

K1 – recognizes and solves basic problems related to animal welfare and hygiene

K2 – is aware of professional and ethical responsibility for animal welfare

K3 – works individually and in a team carrying out designated tasks

TEACHING FORMS AND METHODS:

Lecture(W1;W2;U3;K2;):Lecture with multimedia presentations

Classes(W3;U1;U2;U3;K1;K2;K3;):Interactive classes with multimedia presentation.

FORM AND CONDITIONS OF VERIFYING LEARNING OUTCOMES:

Lecture (Written exam) - structured open-ended questions -

Classes (Colloquium test) - Colloquium No. 1 and No. 2: descriptive answers to the formulated questions -

Practical classes (Evaluation of the work and cooperation in the group) - Discussion. -

BASIC LITERATURE:

1. Kołacz R., Dobrzański Z. (red.), *Higiena i dobrostan zwierząt*, Wyd. Uniwersytet Przyrodniczy we Wrocławiu, R. 2019

2. Appleby C., Hughes B.O., *Animal welfare*, Wyd. CAB International, Cambridge., R. 2011

SUPPLEMENTARY LITERATURE:

1. Dobrzański Z., Kołacz R., *Przewodnik do ćwiczeń z zoohigieny*, Wyd. AR Wrocław, R. 1996

2. Kośła T., *Ćwiczenia z higieny zwierząt*, Wyd. SGGW Warszawa, R. 2001

3. Kośła T., *Metodyka badań z higieny zwierząt i prewencji weterynaryjnej*, Wyd. SGGW Warszawa, R. 2011

4. Nawrocki L., *Technika a dobrostan bydła*, Wyd. Oficyna Wydawnicza Politechniki Opolskiej, R. 2009

5. Dobkowski A., Staśkiewicz K., *Budynki dla Bydła. Podstawowe wymagania technologiczne i techniczne oraz przykłady rozwiązań*, Wyd. AGROSUKCES Lewandowska Joanna, Warszawa, R. 2008

6. Nawrocki L., *Inżynieria produkcji świń*, Wyd. Oficyna Wydawnicza Politechniki Opolskiej, R. 2011

Detailed description of ECTS credits awarded - part B

02S10-HPDZI

ECTS: 3.00

CYCLE: 2024L

Animal Hygiene, Disease Prevention and Animal Welfare I

The number of ECTS credits awarded consists of:

1. Contact hours with the academic teacher:

| | |
|---------------------------------------|---------|
| - participation in: Lecture | 15.0 h |
| - participation in: Classes | 21.0 h |
| - participation in: Practical classes | 9.0 h |
| - consultation | 1.0 |
| Total: | 46.0 h. |

2. Independent work of a student:

| | |
|------------------------------------|---------|
| Preparation to classes. | 10.00 h |
| Preparation to colloquium. | 9.00 h |
| Protocols and reports preparation. | 10.00 h |

Total: 29.0 h

contact hours + independent work of a student Total: 75.0 h

1 ECTS credit = 25-30 h of an average student's work, number of ECTS credit = $75.0 \text{ h} : 25.0 \text{ h/ECTS} = 3.00$ ECTS on average:
3.0 ECTS

- including the number of ECTS credits for contact hours with the direct participation of an academic teacher: 0,00 ECTS points,

- including the number of ECTS credits for hours of independent work of a student: