Course code: 06-EMS-APHYS-SP1 / 06-EMS-APHYS-SP2 **Plan position:** ……

A. INFORMATION ABOUT THE COURSE

B. Basic information

Name of course	Animal Physiology
Field of studies	
Level of studies	
Profile of studies	
Form of studies	
Specialty	
Unit responsible for the field of studies	Faculty of Animal Breeding and Biology
Name and academic degree of teacher(s)	Magdalena Stanek, PhD, Assoc. Prof. Iwona Ałtyn, PhD
Introductory courses	
Introductory requirements	

C. Semester/week schedule of classes

Semester	Lectures (W)	Auditorium classes (Ć)	Laboratory classes (L)	Project classes (P)	Seminar (S)	Field classes (T)	Number of ECTS points
	15		10				5

2. LEARNING OUTCOME

No.	Learning outcomes description	The reference to the learning outcomes of specific field of study	The reference to the learning outcomes for the area
KNOWLEDGE			
W1	He has knowledge of terminology, nomenclature, basic physiological and biochemical processes occurring in animal organisms		
W2	He has knowledge and understands basic principles of functioning of the animal organism and connections between basic physiological processes occurring in animal organisms		
SKILLS			
U1	He has the ability to use elementary analytical techniques used in physiology		
U2	He has the ability to assess selected parameters of animal health, takes preventive and prophylactic action to ensure correct body functions		

SOCIAL COMPETENCES			
K1	He is able to work independently and in a team; to cooperate and perform entrusted tasks, control and discuss the effects of work		

3. TEACHING METHODS

A. Traditional methods used ***

multimedia presentations, laboratory analyses, individual students' work

B. Distance learning methods used ***

Synchronous method (classes conducted in a way that ensures direct interaction between the student and the teacher in real time, enabling immediate flow of information, the method can be used only if it is provided for in the study plan for a given cycle of education):
e.g. remote lecture in the form of videoconference, remote discussion, etc.

Asynchronous method used as an auxiliary (a method that does not ensure direct interaction between the student and the teacher in real time, used only as an auxiliary / complementary method):
e.g. online educational videos, online multimedia presentations, etc.

4. METHODS OF EXAMINATION

worksheets, presentation, referat

5. SCOPE

Lectures	Division of the nervous system (functional; anatomical); structure and properties of the neuron; mechanism of generation and conduction of a nerve impulse. Composition and functions of blood; characteristics and physiological role of white blood cells (granulocytes, lymphocytes, monocytes), red blood cells and blood plasma. Immunity – definition and basic concepts; division and characteristics of cellular and humoral immunity. Structure and functioning of the digestive system; functions of gastric juice, pancreatic juice, bile. Structure and functions of the respiratory system; mechanism of inhalation and exhalation; regulation of breathing.
Laboratories	Determination of reflex time using the Türk method. Examination of the effect of stimulus strength on the size of muscle contraction; recording of skeletal muscle contractions. Blood analyses; determination of the number of red and white blood cells; determination of the hematocrit value and the hemoglobin content in blood. Analysis of the effect of bile on the digestion of fats, the effect of pH and temperature on the digestion of protein by pepsin, the effect of rennet on milk casein.

6. METHODS OF VERIFICATION OF LEARNING OUTCOMES

LEARNING OUTCOME	Form of assessment					
	Oral examination	Written exam	Colloquium	Worksheet	Presentation	Referat
W1				x	x	x
W2				x	x	x
U1				x		x
U2				x		x
K1				x	x	

7. LITERATURE

Basic literature	Dee Fails A., Magee Ch. Anatomy and Physiology of Farm Animals. Wiley-Blackwell, 2018. Randall D., Burggren W., French K. Eckert Animal Physiology: mechanisms and adaptations. W. H. Freeman and Company, 2000.
Supplementary literature	Bowden S. Veterinary Anatomy and Physiology: A Workbook for Students, Butterworth-Heinemann, 2003. Lawson J.R. Anatomy and physiology of animals. Platypus Global Media, 2011. Hill R.W., Wyse G.A., Anderson M. Animal physiology. Sinauer Associates, 2016.

8. TOTAL STUDENT WORKLOAD REQUIRED TO ACHIEVE EXPECTED LEARNING OUTCOMES EXPRESSED IN TIME AND ECTS CREDITS

Student's activity		Student workload– number of hours
Classes conducted under a direct supervision of an academic teacher or other persons responsible for classes	Participation in classes indicated in point 1B	25
	Supervision hours	5
Student's own work	Preparation for classes	40
	Reading assignments	25
	Other (preparation for exams, tests, carrying out a project etc)	30
Total student workload		125
	Number of ECTS points	5