Module title:	Animal nutrition and feeding	ECTS	4
Polish translation:	Żywienie zwierząt i paszoznawstwo		
Course:	Veterinary Medicine		

Module language:	English				Stage:	JM-FVM	
Form of ■ intramural studies: □ extramural		☐ basic ■ directional	mandatory elective	Semester:4		winter semestersummer semester	
			Academic year:	2022/2023	Catalogue number:	FVM-V-JMSS-04S-D04_19	

Module coordinator:		prof. dr hab. Mikołaj A. Gralak				
Teachers responsible for module:						
Objectives of the module	:	During the course, students acquire knowledge of nutrients and basic principles of feeding. Students should understand health problems arising from the improper nutrition including deficiencies, toxicoses and imbalance of nutrients. Students can calculate and balance a diet for different categories of farm animals.				
Teaching forms, number of hours:		 a) Lectures; hours 30; b) Laboratory classes; hours 30(calculations of diets, seminars); c) 				
Teaching methods:		Presentation of the selected topics of animal nutrition and feeding. Presentation the animal diet. Seminars on feeding of different farm species prepared by stude Consultations during project practicals. Detailed schedule will be defined by the coordinator of the course at the beginnin Detailed organization of consultations will be defined by the coordinator of th semester.	nts. ng of semester.			
Formal prerequisites and requirements:	initial	They should know basic units of the SI system and understand calculations, espec promiles, ppm etc. Students should have the basic knowledge of animal husbandry know MS Excel at medium level.				
Learning effects		Course outcomes:	Learning outcomes relative to the course outcomes	Impact on the course outcomes*		
Knowledge:	1	Student knows rules of animal feeding (according to the species specifics),	B.W.9, B.W.13, B.W.14	3		
	2	S. knows symptoms resulting from wrong nutritional and/or feeding practice	A.W.21	3		
	3	Student knows rules for consumer risk assessment	B.W.17	2		
	4	Student knows rules of intellectual property	A.W.23	1		
Skills:	1	Student can evaluate nutritional state of the animal	B.U.5	3		
	2	Student can elaborate and analyse diet composition	B.W.14	3		
	3	Student can interpret nutritional causes of pure animal performance	B.U.20	3		
	4	Student can interpret information from scientific opinions and papers	A.U.22, C.U.2	3 1		
Competences:	1	Student calculates a balanced diet	C.U.3	3		
	2	Student ordains information on proper animal nutrition	B.U.21	3		
Objectives of the module to obtain learning effects	•			1		

Assessment methods:	Attendance to lectures and classes (at least 80%), seminar prepared by student (positive grade), two different diets elaborated by student (both positively evaluated) and two written or oral tests (open questions) positively graded. All these conditions have to be met for the positive credit (3 – 5).			
Assessment methous.	Written exam (at least eight open questions)			
	Written exam (at least eight open questions). In case of unforeseen, unusual circumstances mandatory remote teaching and remote assessment methods			
	might be adopted.			
Detail description of assessment methods;	No extra assessment methods are anticipated.			
	Elaborated diets; the credit and exam protocols; tests and exam papers signed by students.			
Formal documentation of learning	eHMS entry, MS Teams communication.			
outcome:	Records collected in the course portfolio i.e. individual records of student results, presence lists, database of			
	oral and written questions, written assessments of the students.			
	A positive credit result $(3-5)$ – the condition of an approach to the exam			
	A positive result of the exam $(3-5)$			
	Grading scale:		1	
	Number of points:	Grade		
	0 – 25	2 (failed)		
Elements impelling final grade:	25.5 – 28	3 (sufficient)		
	28.5 - 31	3.5 (sufficient +)		
	31.5 - 34	4.0 (good)		
	34.5 – 37	4.5 (very good)		
	37.5 – 40	5.0 (excellent)		
Teaching base:	Facilities of the Faculty			

Mandatory and supportive materials :

1. Topics presented during lectures (students are obligated to make adequate notes during lectures).

2. Topics presented on seminars.

3. Text book: Peter R. Cheeke: Applied Animal Nutrition: feeds and feeding. Pearson Education Inc., Upper Saddle River, New Jersey, 2005, 3rd ed.

4. Self-study: P. McDonald, R.A. Edwards, J.F.D. Greenhalgh, C.A. Morgan: Animal Nutrition. Pearson Education Limited, Harlow, 2002, 6th ed.

5. Relevant scientific publications including those of the module coordinator.

ANNOTATIONS

No electronic devices can be used during lectures.

* 3 – complete and detailed, 2 – moderate, 1 – basic.

Quantitative summary of the module:

Estimated number of work hours per student (contact and self-study) essential to achieve presumed learning outcomes of the module - base for quantifying ECTS:	109 h
Total ECTS points, accumulated by students during contact learning:	2. ECTS