

## DISCIPLINE DESCRIPTION

### 1. Program data

1.1 Higher education institution	UNIVERSITY OF ORADEA
1.2 Faculty	Environment protection
1.3 Department	Animal science and Agroturism
1.4 Field of study	Animal Science
1.5 Study cycle	BACHELOR
1.6 Study Program / Qualification	Animal science/ engineer

### 2. Discipline data

2.1 Name of the discipline	NUTRITION AND ANIMAL FEEDING II						
2.2 Course holder	Prof. dr. Mierlita Daniel						
2.3 Seminar / laboratory / project owner	Prof. dr. Mierlita Daniel						
2.4 Year of study	III	2.5 Semester	V	2.6 Type of evaluation	E	2.7 The discipline regime	I

(I) Impusă; (O) Opțională; (F) Facultativă

### 3. Estimated total time (hours per semester of didactic activities)

3.1 Number of hours per week	4	of which: 3.2 course	2	3.3 seminar/laboratory/project	2
3.4 Total hours of the curriculum	56	of which: 3.5 course	28	3.6 seminar / laboratory / project	28
Distribution of Time Fund					ore
Study after manual, course support, bibliography and notes					20
Additional documentation in the library, on the specialized electronic platforms and on the field					8
Training seminars / laboratories, themes, papers, portfolios and essays					16
Tutorial					4
Examinations					8
Other activities.....					
<b>3.7 Total hours of individual study</b>	<b>60</b>				
<b>3.9 Total hours per semester</b>	<b>130</b>				
<b>3.10 Number of credits</b>	<b>6</b>				

### 4. Preconditions (where applicable)

4.1 curriculum	
4.2 skills	

### 5. Conditions (where applicable)

5.1. of course	The lecture room with laptop and videoprojector.
5.2. seminar / laboratory / project	Laboratory room equipped with the equipment necessary to determine the nutrient content and appreciation of the feed quality; computers, Internet connection, specialized software.

### 6. Specific skills accumulated

Professional skills	<p>C1: Elaboration, implementation and coordination of technological processes specific to animal and aquatic animal breeding.</p> <p>C2: Elaboration of technical projects for the establishment / modernization of livestock breeding, fish farming and aquaculture and for accessing financial resources.</p> <p>C3: Selection, amelioration, production and exploitation of biological reproductive material.</p> <p>C5: Implementation of Community Agricultural Policy at national level in the field of animal production.</p> <p>C6: Provide consultancy and extension services in the field of animal husbandry.</p>
Transversal skills	<p>CT2 Applying effective communication techniques in team-specific activities; taking a role in it and respecting the principles of division of labor.</p> <p>CT3 Objective self-evaluation of the need for continuous professional training in order to adapt and respond to the economic requirements; the use of information and communication techniques and at least one international language.</p>

### 7. Objectives of the discipline

7.1 The general objective of the discipline	<p>To communicate to students the concepts, notions and experimental data on:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Nutrients and their nutritional importance,</li> <li><input type="checkbox"/> digestive use and nutritional value of fodder, in the context of proper nutrition;</li> <li><input type="checkbox"/> establishing the nutritional requirements of animals.</li> </ul>
7.2 Specific objectives	<ul style="list-style-type: none"> <li><input type="checkbox"/> Knowledge of the anatomical-physiological and biochemical bases of nutrition;</li> <li><input type="checkbox"/> Determining the nutritional value of the feed relative to the species;</li> <li><input type="checkbox"/> Optimization of feed ratios for the combined feed structure in relation to the species, age, form and level of production.</li> </ul>

### 8. Contents \*

8.1 Cours	teaching methods	Nr. Hours / Observations
Standard feeding of domestic animals. Influence of nutrition on quantitative and qualitative production in animals. Establishing nutrient requirements for vital functions and for different forms of production.	Lecture, explanation, conversation and dialogue with students heuristics	<b>2</b>
<b>Voluntary consumption of food and the behavior of animals.</b>	Lecture, explanation, conversation and dialogue with students heuristics	<b>2</b>
The feed of cattle. Characteristics of digestion and capitalization of feed in cattle. Feeding of breeding bulls, pregnant cows and lactation. Nutrition of calves and breeding youngsters.	Lecture, explanation, conversation and dialogue with students heuristics	6

Feeding of cattle under fattening.		
Sheep diet. Characteristics of digestion and capitalization of sheep feed. Feed of adult breeding sheep. Lamb feeding and breeding youth. Feeding of sheep.	Lecture, explanation, conversation and dialogue with students heuristics	4
Horse food. Characteristics of digestion and exploitation of horse feed. Nutrition of adult breeding horses. Feeding of horse and youth.	Lecture, explanation, conversation and dialogue with students heuristics	2
Feeding pigs. Features of digestion and feed utilization of pigs. Feed of adult breeding pigs. Feeding piglets and breeding youngsters. Feeding of fattening pigs.	Lecture, explanation, conversation and dialogue with students heuristics	4
Bird feeding. Characteristics of digestion and exploitation of food in birds. Feeding of hens (laying hens, replacement youth, broilers). The turkey diet. Food of palm-trees.	Lecture, explanation, conversation and dialogue with students heuristics	4
Eating rabbits	Lecture, explanation, conversation and dialogue with students heuristics	1
Fish feeding	Lecture, explanation, conversation and dialogue with students heuristics	2
Dog and cat food	Lecture, explanation, conversation and dialogue with students heuristics	1
References		
<p>DRINCENU D. (1994) - Alimentația animalelor domestice. Ed. Euroart, Timișoara.</p> <p>HALGA P. și col. (2000) – Nutriție animală. Ed. Dosoftei, IAȘI.</p> <p>HALGA P. și col. (2002) –Alimentație animală. Ed. Pim, IAȘI.</p> <p>MCDONALD; R.A. EDWARDS; JFD GREENHALGH; C.A. MORGAN (2002) – Animal nutrition. Pearson, Prentice Hall.</p> <p>MARCU N.; D. MIERLIȚĂ (2006) – Zootehnie generală și alimentație. Ed. Digital Data; Cluj-Napoca.</p> <p>MIERLITA D. (2008) – Nutritia si alimentatia animalelor-Curs universitar. Ed. Universitatii din Oradea.</p> <p>MIERLITA D. (2008) – Nutritia animalelor domestice. Ed. AcademicPres, Cluj-Napoca.</p> <p>POP I.M. (2002) – Aditivi furajeri. Ed. Pim, IAȘI.</p> <p>POND W. G.; D.C. CHURCH; K. R. POND (1995) – Basic animal nutrition and feeding. Fourth Edition – Wiley; New York.</p> <p>POPA O.; GH. SĂLĂJAN; A. ȘARA (1991) – Nutrețurile și nutriția rațională a animalelor de fermă. Ed. Ceres, București.</p>		

<p>SĂLĂJAN GH. (1984) – Prepararea nutrețurilor și controlul calității lor. Ed. Ceres, București.          STOICA I. (2001) – Nutriția și alimentația animalelor. Ed. Coral Sanivet, București.          ȘARA A.; D. MIERLIȚĂ (2003) – Nutriția și alimentația animalelor de fermă. Ed. AcademicPres, Cluj-Napoca.</p>		
8.2 Seminar	teaching methods	Nr. Hours / Observations
8.3 Laboratory		
Optimization of sheep feed ratios (winter - summer).	lecture, explanation, dialogue with students, individual and team activities.	<b>2</b>
Optimization of feed ratios in horses (winter - summer).	lecture, explanation, dialogue with students, individual and team activities.	<b>2</b>
Optimization of feed ratios in pigs (winter - summer).	lecture, explanation, dialogue with students, individual and team activities.	<b>2</b>
Optimization of rations in rabbits (winter - summer).	lecture, explanation, dialogue with students, individual and team activities.	<b>1</b>
Optimization of recipes for mixed pig feeds (all age and production categories: sows, pigs, infant and wean piglets, pig breeding pigs and fattening pigs).	lecture, explanation, dialogue with students, individual and team activities.	<b>3</b>
Optimization of recipes for combined fodder for birds (chickens: breeding, consumption eggs, replacement youth and broilers).	lecture, explanation, dialogue with students, individual and team activities.	<b>3</b>
Optimizing recipes for mixed feed for rabbits, fish.	lecture, explanation, dialogue with students, individual and team activities.	<b>1</b>
8.4 Project		
Optimization of feed ratios in dairy cows (winter - summer).	explanation, dialogue with students, individual activities.	2
Calculation of production and consumption indicators in dairy cows.	explanation, dialogue with students, individual activities.	1
Optimization of feeding ratios in intensive and semiintensive cattle for young cattle.	explanation, dialogue with students, individual activities.	2
Calculation of production and consumption indices for fattening young cattle.	explanation, dialogue with students, individual activities.	1
Optimization of recipes for mixed pig feeds (all age and production categories: sows, pigs, infant and wean piglets, pig breeding pigs and fattening pigs).	explanation, dialogue with students, individual activities.	3
Calculation of production and consumption indices for breeding sows and juveniles.	explanation, dialogue with students, individual	1

	activities.	
Optimization of recipes for combined fodder for birds (chickens: breeding, consumption eggs, replacement youth and broilers).	explanation, dialogue with students, individual activities.	3
Calculul indicilor de productie si consum la gainile oua consum si puii de carne.	explanation, dialogue with students, individual activities.	1
References:		
<p>DRINCENU D. (1994) - Alimentația animalelor domestice. Ed. Euroart, Timișoara.          HALGA P. și col. (2000) – Nutriție animală. Ed. Dosoftei, IAȘI.          HALGA P. și col. (2002) –Alimentație animală. Ed. Pim, IAȘI.          MIERLITA D. (2008) – Nutritia si alimentatia animalelor-Curs universitar. Ed. Universitatii din Oradea.          POPA O.; GH. SĂLĂJAN; A. ȘARA (1991) – Nutrețurile și nutriția rațională a animalelor de fermă. Ed. Ceres, București.          SĂLĂJAN GH. (1984) – Prepararea nutrețurilor și controlul calității lor. Ed. Ceres, București.          STOICA I. (2001) – Nutriția și alimentația animalelor. Ed. Coral Sanivet, București.          ȘARA A.; D. MIERLIȚĂ (2003) – Nutriția și alimentația animalelor de fermă. Ed. AcademicPres, Cluj-Napoca.</p>		

**9. Corroborating the contents of the discipline with the expectations of epistemic community representatives, professional associations and representative employers in the field of the program**

The thematic content of the Nutrition and Nutrition discipline is in line with that of other university centers in the country and abroad. It is developed in collaboration with the representative employers in the field of animal husbandry (zootechnical farms, combined feed factories), where the students practice, thus facilitating the graduation of the students.

**10. evaluation**

Tip activitate	10.1 Evaluation criterias	10.2 Metode de evaluare	10.3 Weight of the final grade
10.4 Cours	correctness and completeness of knowledge; - logical coherence; - degree of assimilation of specialized terms - interest in individual study.	continuous evaluation (student's free exposure, oral conversation and questioning, active student participation in courses)  summative assessment (final written assessment during the exam session)	20%  40%
10.5 Seminar			
10.6 Laboratory	- the ability to work with assimilated knowledge; - the capacity to operate with the data and the results obtained in the laboratory;	continuous assessment (current written papers, individual papers, active participation of the student in laboratory activities)  Summative assessment	25%

	- interest in individual study.	(final written assessment during the exam session).	15%
10.7 Project			
10.8 Minimum performance standard: Very good knowledge of one subject out of two; the score given for the periodical checks during the semester should be at least 5; marking "very good" at least ½ of the papers (homeworks) handed over during the year; attending at least 80% of the teaching activities.			

Date of completion

Signature of course holder

Signature of holder  
seminar/laboratory/project  
Prof. dr. ing. Mierlita D.

01. 10. 2022

Prof. dr. ing. Mierlita D.  
(dadi.mierlita@yahoo.com)

Date of approval in the department

Signature of Department Director  
Lecturer dr. ing. Monica Dodu

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Sign Decan  
Conf. Dr. Ing. Cristina Maerescu