University of Life Sciences "Ion Ionescu de la Brad" Iaşi
Faculty: Veterinary Medicine
Specialty: Veterinary Medicine

Dean,
Prof. dr. Mihai Mareş

SUBJECT OUTLINE

1. Information on the programme

1.1. Higher education institution	University of Agricultural Sciences and Veterinary Medicine of Iasi
1.2. Faculty	Veterinary Medicine
1.3. Department	VII – Fundamentals in animal sciences
1.4. Field of study	Veterinary Medicine
1.5.Cycle of study[1]	Bachelor and Master (unitary study programme)
1.6.Specialization/ Study programme	Veterinary Medicine
1.7. Form of education	Full time

2. Information on the discipline

2.1. Name of the discipline	**Animal nutrition 1**							
2.2. Course coordinator				Univ. Prof. PhD Mircea POP				
2.3. Seminar/ laboratory/ project coordinator				Lecturer PhD Cristina RADU-RUSU				
2.4. Year of study	**II**	2.5. Semester	**3**	2.6. Type of evaluation	Colocvium	2.7. Discipline status	Content[2]	AP
							Compulsoriness[3]	CD

3. Total estimated time (teaching hours per semester)

3.1. Hours per week – full time programme	4	out of which: 3.2. lecture	2	3.3. seminar/ laboratory/ project	2
3.4.Total number of hours in the curriculum	56	Out of which: 3.5.lecture	28	3.6.seminar/laboratory	28
Distribution of the time allotted					hours
3.4.1. Study based on book, textbook, bibliography and notes					28
3.4.2. Additional documentation in the library, specialized electronic platforms and field					14
3.4.3. Preparing seminars/ laboratories/ projects, subjects, reports, portfolios and essays					28
3.4.4.Tutorials					2
3.4.5.Examinations					4
3.4.6. Other activities					

3.7. Total hours of individual study	76
3.8. Total hours per semester	90
3.9. Number of credits[4]	3

4. Prerequisites (is applicable)

4.1. curriculum-related	Anatomy, Biochemistry, Physiology, Agronomy, Animal husbandry
4.2. skills-related	The student must have knowledge regarding the basic concepts of anatomy, chemistry, biochemistry, physiology, animal husbandry and agronomy.

5. Conditions (if applicable)

5.1. for the lecture	The course is interactive; students can ask questions regarding the content of the presentation.
5.2. for the seminar/ laboratory/ project	At practical work is required to study the materials presented in the lectures; each student will conduct an individual activity using the laboratory materials provided. Laboratory meeting begins with a seminar having as topics the material taught in the previous courses and laboratories.

6. Specific competences acquired

Professional competences	- basic skills in animal nutrition - initiation of students in laboratory analysis of feed quality evaluation and the nutritional evaluation of feeds - to know the chemical composition of food in relaton with the animal metabolism and animal body - to know the animal nutrition particularities of farm and pet species; - to know the nutritional requirements by species and categories
Transversal competences	- Effective use of various ways and techniques of learning - training for documentation through the use of bibliographic and electronic databases both in Romanian and in a language of international circulation, as well as assessing the need and usefulness of extrinsic and intrinsic motivations of education continuity - Ability to multidirectional communication within a team; as well as optimal time management - responsibility for the results of personal activity, creativity, analytical and critical thinking, problem solving, etc., based on the principles, norms and values of the growing code of professional ethics animal.

7. Course objectives (based on the list of competences acquired)

7.1. Overall course objective	- basic skills in animal nutrition and feeding - knowledge of the animal nutrition particularities of farm and pet species;
7.2. Specific objectives	- initiation of students in laboratory analysis of feed quality evaluation and the nutritional evaluation of feeds - to know the chemical composition of food in relaton with animal bodu and metabolism - knowledge of the nutritional requirements by species and categories

8. Content semester I

8.1. LECTURE **Number of hours – 28**	Teaching methods	Notes
Particularities of digestion and nutrient utilization by species. The nutritional value of feed and its assessment. Chemical composition of feedstuffs. The importance of nutrients in animal body. The digestibility and its factors of influence Energy and nutrients metabolism Methods and systems for the assessment of the nutritional value of feedstuffs. Feed intake and consumption. Nutritional requirements of farm animals.	Lecture	A two-hour lecture weekly

8.2. PRACTICAL WORKS **Number of hours – 28**		
1. Chemical composition of raw materials and feedstuffs and methods for determination. 2. Estimation of the nutritional value of feeds. 3. Feed intake and consumption. Estimation and importance. 4. Nutritional requirements of animals.	Theoretical and practical presentation of the lessons, followed by interactive discussions based on the approached theme and execution of the work	A two-hour session weekly

Compulsory bibliography:

1. Course information/notes and on-line information from uaiasi/Moodle and practical work support

Recommended bibliography:

1. Church D. C. and col., 1989 - Basic Animal Nutrition and Feeding, 3–rd Ed. John Wiley and Sons, New York.
2. Cole D.J. and col., 1976 - Protein metabolism and nutrition, Butterworth, London–Boston
3. Pond W. G. şi col., 1995 – Basic Animal Nutrition and Feeding, John Wiley & Sons. Inc.New York.
4. P.McDonalds and col. – Animal nutrition. Seventh Edition. Pearson Ed., London U.K. www.pearsoned.co.UK

9. Coroborating the course content with the expectations of the epistemic community representatives, of the professional associations and of the relevant employers in the corresponding field

The course structure is related to the educational program of the fundamental and preclinical disciplines.
The discipline content is developed in correlation with necessary requirements for "day one skills" and "year one skills"

10. Assessment

Type of activity	10.1. Assessment criteria	10.2. Assessment methods	10.3. Percentage of the final grade
10.4. Lecture	The notions assimilated during the lectures will be evaluated writing in the exam session.	MCQs test	70 %
10.5. Seminar/Laboratory	Laboratory work assessment must highlight the assimilation degree (theoretical and practical) obtained by the student.	Continuous evaluation of the personal activity and a complete personal portofolio about the practical works	30 %
10.6. Minimum performance standards			
Knowing the terms and basic concepts of animal nutrition, the chemical composition of feedstuffs in relation with the animal body and metabolism; generalities (principles, methods and terms about the nutritional value assessement of feeds)			

[1] Cycle of studies- choose of the three options: Bachelor/Master/Ph.D.

[2] Discipline status (content)- for the undergraduate level, choose one of the options:- **FD** (fundamental discipline), **BD** (basic discipline), **CS** (specific disciplines-clinical sciences), **AP** (specific disciplines-animal production), **FH** (specific disciplines-food hygiene), **UO** (disciplines based on the university's options).

[3] Discipline status (compulsoriness)- choose one of the options – **CD** (compulsory discipline) **OD** (optional discipline) **ED** (elective discipline).

[4] One credit is equivalent to 25-30 hours of study (teaching activities and individual study).

Date
12.09. 2021

Course coordinator
Univ. Prof. PhD Mircea POP

Laboratory work/seminar coordinator
Lecturer PhD. Cristina RADU-RUSU

As

Date
14.09. 2021

Head of the Department
Assoc. Prof. PhD Daniel SIMEANU

Date
17.09. 2021

Approved in Faculty Council