

General information	
Academic subject	Animal Nutrition (i.c. Animal Production II)
Degree course	Animal Science
Academic Year	2021/2022
European Credit Transfer and Accumulation System (ECTS)	6
Language	Italian
Academic calendar (starting and ending date)	II semester (February, 28 th 2022 –June, 17 th 2022)
Attendance	

Professor/ Lecturer	
Name and Surname	Vincenzo Tufarelli
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Department and address	Veterinary Medicine Campus – Valenzano (BA)
Virtual headquarters	Microsoft Teams
Tutoring (time and day)	Monday and Wednesday 2.30- 3.30 pm According to an appointment requested by e-mail. Tutoring can be done using e-learning platforms.

Syllabus	
Learning Objectives	Nutritional evaluation of animal feeds. Rationing of the main livestock species: cattle, sheep, goats, pigs, horses, poultry, rabbits and pets.
Course prerequisites	Exam : Physiology and Endocrinology of domestic animals: basic knowledge Basic knowledge of biochemistry, animal physiology and anatomy.
Contents	Chemical composition of feeds of zootechnical interest: carbohydrates, lipids, nitrogenous substances, minerals and vitamins. Evaluation feeds quality. Digestion, absorption, and metabolism in monogastric and ruminant species. Nutritional value: digestibility, systems of expression of the energy and protein value in the different species. Animal feeds: green and preserved fodder (hay, haylage, silage), cereals and their by-products, oilseeds and by-products. Residues from the food/feed industry, mineral and vitamin supplements, natural additives. Nutritional requirements and rationing factors of animals in maintenance, gestation, growth, production (meat, milk, eggs). Rationing of livestock species: cattle, sheep, goat, pig, horse, rabbit, poultry and pets. Feed technology: principles of legislation on feed preparation and innovative technological treatments of animal feeds.
Books and bibliography	<ul style="list-style-type: none"> • Antongiovanni M. Gualtieri M., Nutrizione e alimentazione animale, Bologna, Edagricole., 1998 • Pulina G., L' alimentazione degli ovini da latte. Avenue Media, 2001. • Martin-Rosset W., L'alimentazione dei cavalli, Bologna, Edagricole, 1994 • Mordenti, N. Rizzitelli, D. Cevolani, Manuale di alimentazione del suino, Bologna, Edagricole, 1992. • Lessons notes. • Scientific papers.
Additional materials	Lessons distributed during the course integrate the reference bibliography.

Work schedule			
Total	Lectures	Hands on (Laboratory, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
Hours			
150	50	25	75

ECTS			
6	5	1	
Teaching strategy			
		The course contents will be treated with support of PowerPoint presentations in the classroom.	
Expected learning outcomes			
Knowledge and understanding on:		<ul style="list-style-type: none"> ○ Knowledge of the field and laboratory techniques for the nutritional evaluation of feeds of zootechnical interest. 	
Applying knowledge and understanding on:		<ul style="list-style-type: none"> ○ The student must be able to relate the quantitative and qualitative characteristics of the animal production to the characteristics of the diet supplied. 	
Soft skills		<ul style="list-style-type: none"> • <i>Making informed judgments and choices</i> <ul style="list-style-type: none"> ○ Ability to independently judge data related to zootechnical issues or to represent and solve problems inherent to animal feeding. • <i>Communicating knowledge and understanding</i> <ul style="list-style-type: none"> ○ Rationing of livestock and companion animals: cattle, sheep and goat, pig, horse, poultry, rabbit and pets. • <i>Capacities to continue learning</i> <ul style="list-style-type: none"> ○ Ability to maintain, develop and expand the knowledge acquired. 	
Assessment and feedback			
Methods of assessment		Oral or written exam on topics as for program. The student must demonstrate the skills acquired during the course, the knowledge of the principles of animal nutrition; the student will have to demonstrate mastery of technical language and the relationship between animal nutrition and quality of livestock production.	
Evaluation criteria		<ul style="list-style-type: none"> • <i>Knowledge and understanding</i> <ul style="list-style-type: none"> ○ Knowledge of the field and laboratory techniques for the nutritional evaluation of feeds of zootechnical interest. • <i>Applying knowledge and understanding</i> <ul style="list-style-type: none"> ○ The student must be able to relate the quantitative and qualitative characteristics of the animal production to the characteristics of the diet supplied. • <i>Autonomy of judgment</i> <ul style="list-style-type: none"> ○ The student will have to demonstrate that he is able to make his own judgments, including through the autonomous processing and application of the knowledge and skills acquired. • <i>Communicating knowledge and understanding</i> <ul style="list-style-type: none"> ○ Rationing of livestock and companion animals: cattle, sheep and goat, pig, horse, poultry, rabbit and pets. ○ The student must have property of language and expository clarity, also in using of specific scientific and technical terminology. • <i>Capacities to continue learning</i> <ul style="list-style-type: none"> ○ Ability to maintain, develop and expand the knowledge acquired. 	
Criteria for assessment and attribution of the final mark		The final grade is awarded out of thirty. The exam is passed when the grade is greater than or equal to 18/30. The evaluation acquired in this exam, and in Rabbit, Poultry Science and Aquaculture, will contribute to the final evaluation of the integrated examination of Animal Production II.	
Additional information			
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