

General Information	
Academic subject	<b>Principles of Animal Nutrition</b> (module of I.C. Animal Husbandry)
Degree course	Agricultural Science and Technology L-25
Curriculum	Rural System Management
ECTS credits	3
Compulsory attendance	No
Language	Italian

Subject teacher	Name Surname	Mail address	SSD
	Maria Antonietta	mariaantonietta.colonna@uniba.it	AGR/18
	Colonna		

ECTS credits details		ETCs
Basic teaching activities		3

Class schedule	
Period	I semester
Year	III year
Type of class	Lectures and Lab training activity

Time management	
Hours	75
In-class study hours	30
Out-of-class study hours	45

Academic calendar	
Class begins	28/09/2021
Class ends	21/01/2022

Syllabus	
Prerequisites/requirements	Basic knowledge of biochemistry, animal physiology and anatomy
Expected learning outcomes (according to Dublin Descriptors) (it is recommended that they are congruent with the learning outcomes contained in A4a, A4b, A4c tables of the SUA-CdS)	<p><i>Knowledge and understanding</i> Knowledge of the field and laboratory techniques for the nutritional evaluation of feeds of zootechnical interest.</p> <p><i>Applying knowledge and understanding</i> The student must be able to relate the quantitative and qualitative characteristics of the animal production to the characteristics of the diet supplied.</p> <p><i>Making informed judgements and choices</i> Ability to independently judge data related to zootechnical issues or to represent and solve problems inherent to animal feeding.</p> <p><i>Communicating knowledge and understanding</i> Rationing of livestock animals: cattle, sheep and goat, pig, horse, poultry and rabbit.</p> <p><i>Capacities to continue learning</i> Ability to maintain, develop and expand the knowledge acquired.</p>
Contents	Chemical composition of feeds for livestock: carbohydrates, lipids, nitrogenous substances, minerals and vitamins. Evaluation of feed 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, additives. Nutritional requirements and rationing factors of livestock species in maintenance, gestation, growth, production (meat, milk, eggs). Rationing for animals in livestock production: cattle, sheep, goat, pig, horse, rabbit and poultry. Feed technology: principles of legislation on feed preparation and innovative technological treatments of zootechnical feeds.

Course program	
Bibliography	<ul style="list-style-type: none"> <li>• Lessons notes.</li> <li>• Scientific papers.</li> <li>• Antongiovanni M. Gualtieri M., Nutrizione e alimentazione animale, Bologna, Edagricole.</li> <li>• Pulina G., L' alimentazione degli ovini da latte. Avenue Media, 2001.</li> <li>• Martin-Rosset W., L'alimentazione dei cavalli, Bologna, Edagricole.</li> <li>• Mordenti, N. Rizzitelli, D. Cevolani, Manuale di alimentazione del suino, Bologna, Edagricole.</li> </ul>
Notes	Lessons distributed during the course integrate the reference bibliography
Teaching methods	The course contents will be treated with support of PowerPoint presentations in the classroom.
Assessment methods (indicate at least the type written, oral, other)	Oral 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 (Explain for each expected learning outcome what a student has to know, or is able to do, and how many levels of achievement there are).	<ul style="list-style-type: none"> <li>• <i>Knowledge and comprehension ability</i> The student will have to demonstrate knowledge and understanding of the teaching content, including data processing, setting of theoretical schemes and critical interpretation of the concepts acquired.</li> <li>• <i>Knowledge and applied comprehension ability</i> The student will have to demonstrate application skills on what has been learned, also through the assessment of the skills approach to problem and identification of possible solutions</li> <li>• <i>Autonomy of judgement</i> 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.</li> <li>• <i>Communication skills</i> The student must have property of language and expository clarity, also in using of specific scientific and technical terminology.</li> <li>• <i>Learning ability</i> The student must be able to rework the learned concepts, demonstrating the ability to solve new and complex theoretical-practical problems.</li> </ul>
Further information	<p><b>Visiting hours</b> Monday and Wednesday 14.30-15.30. According to an appointment requested by e-mail. Tutoring can be done using e-learning platforms.</p>