

Degree course - Agricultural Sciences and Technologies  
Course code – L 25  
Lecturer – Scerra Manuel  
Course name - Animal Nutrition and Feeding  
Disciplinary area – Animal Nutrition  
Disciplinary field of science – AGR 18  
University credits – ECTS - 6  
Teaching hours - 60  
Course year – 2018/2019  
Semester - 1

### Synthetic description and specific course objectives

The principal objective of the course is to give the elements of Nutrition and Animal Feeding to the students, discussing subjects as the digestion, the absorption, the metabolic use of the nutrients both in monogastric and in polygastric; objective of the course is also to give some knowledges on the chemical and technological characteristics of zootechnical feeds

### Course entry requirements

### Course programme

- Course Introduction: definition of nutrition and feeding
- Chemical composition of feeds: Carbohydrates, Proteins, Lipids, Mineral, Vitamins
- Nutritive values of feeds
- Use of the digestible part in the metabolism in monogastric and polygastric animals
- Feeds Energy: nutrient energetic value, expression of feeds energetic value: UFC and UFL
- Expression systems of protein value
- Feeds and Raw materials: fresh forage, hay, straw, byproducts, concentrate, mineral and vitamins supplement
- Requirements in different physiological phases
- Feeding for meat and milk production in cattle, ovine and goats. Feeding in biological systems

### Expected results

Knowledge and understanding ability: In terms of competences acquisition with reference to: nutrients, ruminant and monogastric physiology; evaluation of nutrient requirements; chemical and technological characteristics of zootechnical feeds; principles for meat and milk production; breeding systems for cattle, sheep, goats and pigs.

Judgment autonomy: Ability from the student to interpret, to assess and to correct erroneous feeding systems; to realize the best breeding systems for the studied animal

Communicative ability: Ability from the student to transmit and to spread the information gotten through preliminary analysis.

Learning ability: Ability of understanding and interpretation of technical tables, data bank and other information online; use of tools for the continuous updating of knowledges in Animal Nutrition and Zootechnics

### Course structure and teaching

Lectures (*hours/year in lecture theatre*): 50

Practical class (*hours/year in lecture theatre*):

Practical / Workshops (*hours/year in lecture theatre*): 10

## Student's independent work

The student will have to independently carry out a work of study of the themes assigned by the teacher for a total of about 60 hours of individual work.

## Testing and exams

In itinere tests, Final test: Oral Exam

## Suggested reading materials

- Antongiovanni M. e Gualtieri M. : Nutrizione e Alimentazione animale, Edagricole
- McDonald-Edwards Greenhalgh: Nutrizione animale, Tecniche Nuove.
- Pulina G., L'alimentazione degli ovini da latte. Avenue media. Bologna
- Bittante G., Andrighetto I., Ramanzin M., Tecniche di produzione animale, Liviana Editrice
- Professor notes