

FEEDING

Study programme: MIMV Curricular Year: 3rd Semester: 6th Compulsory ECTS: 4

Lecturers: Luis Ferreira, Rui Bessa (CCP, R), Susana Alves, Maria João Fradinho, Mafalda Gonçalves, Rui Caldeira, Fernando Afonso

1. Contact hours: Lectures – 26; Practical – 26

2. Objectives:

To provide students with theoretical and practical training, allowing them to determine the nutritional requirements of animal species according to type and level of production, choose adequate feeds as well as the ways of processing them. This knowledge will allow the veterinary to optimise animal production as well as to prevent the development of metabolic pathologies, ensuring animal health and well-being and the quality of the final products of animal origin.

3. Programme:

Nutritional requirements of animals. Current methods for analysis of feeds and nutrients. Classification and evaluation of the nutritional value of staple feeds. Technology of production of compound feed. Food processing. Additives: classification and use. Feeding strategies of the various species of domestic animals: cattle, sheep and goats, pigs, poultry, horses, rabbits, fish, cats and dogs. Production cycle and evolution of nutritional needs. Feeding breeding, replacement and meat and dairy animals. Characterization of production systems: intensive, semi-intensive and extensive. Feed intake vs. coverage of nutritional needs; forms of feed presentation and distribution; Major nutritional deficiency diseases; Feeding particularities at the various stages of production. Liquid and solid feed - weaning. Formulation of balanced diets at the minimum cost. Use of linear programming.

4. Bibliography:

Class handouts, lecture notes, scientific and technical papers.

- McDonald, P, Edwards, R.A., Greenhalgh, J.D.F., Morgan, C.A., Sinclair, L.A. & Wilkinson, R.G. Animal Nutrition. Prentice Hall. 7th Edition 2011.
- INRA. Equine nutrition: INRA nutrient requirements, recommended allowances and feed tables. (W. M. Rosset, Ed.) The Netherlands: Wageningen Academic Publishers 2015.
- FEDNA, Fundación Española para el Desarrollo de la Nutrición Animal. Tablas de composición y valor nutritivo de alimentos. Normas FEDNA para la formulación de piensos (vários volumes). Fundación FEDNA.
- Nutrient Requirements of Domestic Animals. National Research Council (NRC). All domestic species. Several dates. National Academy Press. Washington DC.
- FEDIAF. FEDIAF Nutritional Guidelines for Complete and Complementary Pet Food for Cats and Dogs. 2021.

5. Assessment:

Theoretical and practical subjects are evaluated with a written examination that includes short answer questions, multiple-choice questions, true and false and incomplete sentences. The final grade includes 60% of the theoretical component and 40% of the practical component.