



UNIVERSIDADE DE LISBOA
Faculdade de Medicina Veterinária

Animal Production

Curricular Year: 3rd

Duration: 1st Semester

Credits: 5 ECTS

Teachers: Rui Caldeira (CCP); Rui Bessa (R); Fernando Afonso; Maria João Fradinho; Tiago Grosso.

Contact Hours: 62H Total.

26H Lectures; 4H Practical and laboratory teaching; 15H Fieldwork; 8H Seminar; 9H Tutorial orientation

Learning objectives:

Students must acquire the knowledge and the skills that allow them to:

- a) Master the biological foundations of the phenomena and techniques involved in animal production.
- b) Interpret the concepts of productivity, economic efficiency and environmental sustainability.
- c) Define the structure of the production chain, differentiate the types of products obtained and identify the factors that determine their characteristics.
- d) Collect and interpret productive and reproductive indicators.
- e) Compare the different types of production systems used.
- f) Distinguish the productive abilities and the size and location of the main breeds of livestock species present in Portugal.
- g) Be acquainted with the main management techniques used.
- h) Interpret the main legal provisions.

Program contents:

1. General overview of Animal Production in the World, in the European Union and in Portugal. Importance and economic weight of each sector. Consumption of products. Global sustainability.
2. Segments of the Production chain: Dam, Sire and Off sprigs. Main productive and reproductive indicators.
3. Dam segment: main phases of the production cycle. Collection of indicators. Physiology of lactation, milk quality, milking and body condition.
4. Sire segment in meat production
5. Offspring segment: Growth, quality of carcasses and meat. Main productive indicators of meat production
6. Livestock facilities. General principles and objectives. Environmental conditions: ventilation, heating and cooling, lighting.
7. Production of cattle, sheep, goats, pigs, poultry and eggs, rabbits, horses and aquaculture:
 - a. Characterization of sector and products;
 - b. Productive characteristics of the most used indigenous and exotic breeds;
 - c. General management;
 - d. Production systems



UNIVERSIDADE DE LISBOA

Faculdade de Medicina Veterinária

Bibliography:

Presentations in Microsoft PowerPoint to support theoretical classes, scientific and technical articles, legislation and other documents, available on the Moodle e-learning platform

Other scientific and technical articles, legislation, official documentation, links to websites and videos, available on the Moodle platform. Publications:

- Taylor, R.E., Field, T.G., 2019. Scientific farm animal production - An introduction to animal science, 12nd Ed. Pearson Prentice Hall, New Jersey, EUA.
- Phillips, C.J.C., Christie, J. 2018. Principles of cattle production, 3rd Ed., CABI, Wallingford, UK
- Webster, J., 2020. Understanding the dairy cow. 3rd Ed. Wiley-Blackwell, Hoboken, NJ, USA
- Parker R., 2001. The sheep book: A handbook for the modern shepherd. Swallow Press/Ohio University Press, Athens, USA.
- Whittemore, C.T, Kyriazakis, I., 2006. Whittemore's science and practice of pig production. 3rd Ed., Wiley-Blackwell, Oxford, UK.
- Scanes, C.G., Christensen, K.D. 2020. Poultry science. 5th Ed., Waveland Press, Long Grove, IL., USA.

Assessment:

The assessment of the knowledge and skills acquired by the student is carried out through:

a) A written exam in which the subjects taught in theoretical and practical classes are assessed, consisting of quick answer questions (multiple choice, true and false and fill in the gaps in sentences;

b) A written group work (5-7 students) on an Animal Production topic, a project for a livestock farm of one of the species covered or the analysis and resolution of a problem.

The final classification corresponds to the weighted average between the classification obtained in the final exam (80%) and the classification of the group work (20%), on a scale of 0-20 values, with the classification in the final exam being equal to or greater than 10 values.

The student evaluation is also important to assess the efficiency of the teaching-learning methodologies, in compliance with the UC objectives, and to allow future adequate adjustments on the teaching methodologies and/or on the assessment of student's knowledge and skills.