

ANIMAL PRODUCTION

Code: **Curricular Year: 3rd** **Semester: 1st** **Compulsory** **Credits: 5.0 ECTS**

Teaching team: Rui Caldeira (CCP), Rui J. B. Bessa (R), Fernando Afonso, Maria João Fradinho

1. Contact hours: Lectures – 26 hours; Practical and laboratory teaching – 4 hours; Fieldwork - 14 hours; Seminar – 8; Tutorial orientation - 10 hours; Total – 62 hours

2. Objectives:

- Master the biological foundations of the phenomena and techniques.
- Interpret the concepts of productivity, economic efficiency and environmental sustainability.
- Define the structure of production chain and differentiate the products.
- Collect and interpret productive indicators.
- Compare different types of production systems.
- Distinguish productive abilities of the main breeds of livestock in Portugal.
- Be acquainted with the main management techniques.
- Interpret applicable legislation.

3. Syllabus:

- 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.
- Segments of the Production chain: Dam, Sire and Off sprigs. Main productive and reproductive indicators.
- Dam segment: main phases of the production cycle. Collection of indicators. Physiology of lactation, milk quality, milking and body condition.
- Sire segment in meat production
- Offspring segment: Growth, quality of carcasses and meat. Main productive indicators of meat production
- Livestock facilities. General principles and objectives. Environmental conditions: ventilation, heating and cooling, lighting.
- Production of cattle, sheep, goats, pigs, poultry and eggs, rabbits, horses and aquaculture:
 - Characterization of sector and products;
 - Productive characteristics of the most used indigenous and exotic breeds;
 - General management;
 - Production systems.

4. Bibliography:

Presentations to support theoretical classes, scientific and technical articles, legislation and other documents, links to websites and videos, available on Moodle. Publications:

Ullrey, D. E., Baer, C. K., Pond, W. G. 2011. Encyclopedia of animal science. 2nd Ed. Dekker Agropedia Collection. CRC Press, Boca Raton, FL, USA.

Taylor, R.E., Field, T.G., 2019. Scientific farm animal production - An introduction to animal science, 12nd Ed. Pearson Prentice Hall, New Jersey, USA.

4. Evaluation:

- a) Written exam consisting of quick answer questions (80% of the final grade) with a minimum grade of 10 points;
- b) Group work (20% of the final grade).