

28925 - Production of monogastric animals

Syllabus Information

Academic year: 2023/24

Subject: 28925 - Production of monogastric animals

Faculty / School: 201 - Escuela Politécnica Superior

Degree: 583 - Degree in Rural and Agri-Food Engineering

ECTS: 6.0

Year:

Semester: Second semester

Subject type: Optional

Module:

1. General information

It is part of the mandatory training common to all undergraduate students of the Specialty: Farms agricultural and livestock farms, therefore an overview is provided on the differences, both in the systems of exploitation of the various species of livestock interest, as well as the latest techniques for each group.

For the best follow-up of the course it is recommended to have passed the subjects: Mathematics II, Animal Science I, Statistics, Ecology and management of agro-industrial by-products. It is also desirable to have basic knowledge of English for the comprehension of scientific and technical texts.

The approaches and objectives of the subject are related to the following Sustainable Development Goals (SDGs) of the 2030 Agenda:

- Goal 2: Zero hunger
- Goal 9: Industry, innovation and infrastructure
- Goal 12: Responsible production and consumption

and, in particular, with the objectives:

- Target 2.4. By 2030, ensure the sustainability of food production systems and implement resilient agricultural practices that increase productivity and production, contribute to the maintenance of ecosystems, strengthen resilience to climate change, extreme weather events, droughts, floods and other disasters, and progressively improve soil and land quality
- Target 9.4. By 2030, upgrading infrastructure and converting industries to be sustainable, using resources more efficiently and promoting the adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
- Target 12.4. By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse effects on human health and the environment.
- Target 12.5. By 2030, significantly reduce waste generation through prevention, reduction, recycling and reuse activities

2. Learning results

The student, in order to pass this subject, must demonstrate the following results...

To be able to establish the criteria of reproduction, lactation, growth, feeding and genetics that allow to optimize from a technical-economical point of view, the production of monogastric farms.

To be familiar with the facilities and management of the most current monogastric production systems under adequate hygienic and sanitary conditions, with a commitment to the conservation of the environment, and with the sustainable use of its resources.

To be able to analyze the production parameters and identify the critical points of the processes in order to establish continuous improvement practices.

To be able to analyze the most important monogastric production systems, to understand the role of monogastric production both nationally and globally.

Be familiar with the most important legal regulations.

Be able to show a critical and responsible attitude towards quality, environmental and animal welfare issues.

Know how to access sources and avenues of access to cutting-edge research.

Be able to work in a team, including open communication, mutual respect, and with ethical values.

Alignment with SDGs: Goals 2, 3, 5, 6, 7, 7, 8, 9, 10, 10, 11, 12, 13, 14, 15, 17.

3. Syllabus

Block I. Swine Production.

Topic 1.- Situation and problems.

Topic 2.- Reproductive management.

Topic 3.- Genetic improvement.

Topic 4.- Feeding management in breeding swine.

Topic 5.- Intensive pork production.

Topic 6.- Extensive and semi-extensive swine production.

Block II. Poultry production

Topic 7.- Poultry farming.

Topic 8.- Reproductive management and genetic improvement of the hen.

Topic 9.- Artificial incubation.

Topic 10.- Rearing and rearing of pullets.

Topic 11.- Exploitation of breeders

Topic 12.- Exploitation of commercial layers.

Topic 13.- Poultry meat production.

Block III. Rabbit farming.

Topic 14. Rabbit farming.

Topic 15. Rabbit production.

4. Academic activities

Interactive theoretical classes. 40 h.

Practical classes of problems. 10 h.

Practical field trip/seminar classes. 10h

Individual study and work. 85h

Assessment 5h

5. Assessment system

1. Completion of a written test at the end of the first theoretical block and the formulation practices. The test will consist of open-ended questions. Passing this exam will require obtaining at least 50% of the points. Students who pass this test may choose to take an exam at the end of the term only on the contents of the remaining subjects.
2. A written test at the end of the course, in the first and second call, on the contents exposed in the theoretical and practical classes. This test will consist of 8 short questions, which will be graded out of 1 point each, and one on formulation, which will be graded out of 2 points. The grade obtained will represent 100% of the overall grade for the subject.

A minimum of 5 points is required to pass the subject.

The success rates for the subject in the last three years are: 2019/20: 100%; 2020/21: 100%; 2021/22: 100%