

28442 - Clinical Practice: Production Animals

Syllabus Information

Academic year: 2024/25

Subject: 28442 - Clinical Practice: Production Animals

Faculty / School: 105 - Facultad de Veterinaria

Degree: 451 - Degree in Veterinary Science

ECTS: 6.0

Year: 5

Semester: Annual

Subject type: Compulsory

Module:

1. General information

The objective of this course is to apply the knowledge of the integration of ruminants, swine, poultry and rabbits, a fundamental basis for the production animal veterinarian. This veterinarian must integrate production, clinical and health systems to optimize production performance, within the framework of animal welfare and current legislation. The course deals in a practical way with all production species, from intensive breeding to the applied study of their pathologies. In addition, this course aims to develop the student's capacity for anatomopathological diagnosis in all species of veterinary interest. This course has relevance in Public Health, zoonotic diseases, and food quality and safety and is aligned with the United Nations SDGs (<https://www.un.org/sustainabledevelopment/es/>).

2. Learning results

To know the general characteristics of the livestock sector in Spain, and the situation at European and world level. To understand the socioeconomic and structural conditioning factors of animal production and the commercialization of its products, with reference to the legislative, geographical, economic, sanitary and environmental frameworks.

To know the production systems and animal management techniques.

To know the characteristics of housing and facilities and their impact on the different production systems and animal welfare.

To know the different factors that influence the quality of animal products, and to be able to determine the causes of the problems that can affect it.

To know the objectives and criteria of genetic selection, the techniques used in genetic improvement, and their repercussions on animal health and productivity.

To know the main types of feeds, pastures and forages involved in feeding and their use in each production system. To be able to formulate adequate rations to cover the requirements of the animals according to the phase of their productive cycle and the production system, and to evaluate the adequacy of the ingredients and nutritional levels used in animal feeding.

To be able to approach the diagnosis of the main diseases affecting slaughter animals, based on the knowledge of their etiology, epidemiology, pathogenesis, clinical symptomatology, and lesions produced. Know how to perform necropsies, choose the samples and request the most appropriate diagnostic techniques for each case and interpret the results.

To be able to establish and apply the most appropriate treatment for each pathology and to establish prevention and control measures to avoid the appearance of the most important diseases.

Know and understand the reproductive characteristics and mechanisms involved in the parturition of production animals, as well as the treatment of problems associated with it, and be able to control and organize the reproductive activity of the animals.

To be able to take a clinical history and write a veterinary report, as well as to communicate with other professionals using correct technical language.

To know how to apply methods of technical-economic management and sustainability analysis in different livestock farms.

3. Syllabus

There are two blocks: Livestock Practicum and Postmortem Practicum. The Livestock Practicum consists of visiting and carrying out tutored practices in bovine (meat and milk), ovine, porcine (including breeders), poultry (laying hens and chickens) and rabbit farms. The Postmortem Practicum consists of performing necropsies of animals referred to the Veterinary Pathology Diagnostic Service, interpreting them and reaching a macroscopic diagnosis. Reports of these necropsies are to be made. In addition, seminars on lesions and diagnosis are included throughout the course, with appropriate and complementary content to the practical activities. These seminars are evaluable.

- Dairy or beef cattle: visits to several farms, plus the possibility of a seminar.

- Sheep: 2 visits to a livestock farm, plus the possibility of a seminar.

- Swine: visits to several farms and the possibility of a seminar aimed at resolving doubts, preparation of reports, resolution of clinical cases, and in-depth study of certain relevant aspects.

- Poultry (laying hens and chickens) and rabbits. In all cases 3 visits to different farms and possibility of a seminar oriented to solve doubts, preparation of reports, resolution of practical cases, and deepening in certain relevant aspects.

- Necropsies: 10 hours per student for the performance of necropsies referred to the Veterinary Pathology Diagnostic Service of the Veterinary Faculty.

- Diagnostic necropsies: 20 hours per student for discussion of clinical cases referred to the Veterinary Pathology Diagnostic Service of the Veterinary Faculty (usually at 13:00).

- Veterinary Pathology seminars: 7 seminars scheduled throughout the course with content appropriate to the activities performed in the necropsy room and other relevant content for the practice of pathological diagnosis.

4. Academic activities

Livestock Practicum: Students will complete a total of 3.5 ECTS, distributed as follows: ruminants (1.5), swine (1), poultry and rabbits (1). The contents will be developed throughout the course, through organized and tutored visits.

Postmortem Practicum: Students will carry out a total of 2.5 ECTS, with the following activities:

1. Performance of necropsies during one teaching week (two hours/day), including the report of two cases, performed during the week.
2. Pathological diagnosis: Twenty sessions (of one hour of duration) of obligatory and controlled attendance.
3. Seminars: Seven seminars scheduled during the course.

5. Assessment system

Livestock Practicum:

Compulsory attendance, with active participation in practical visits to livestock farms. An evaluation report must be made at the end of the visits. The assimilation of knowledge and individual attitude will be evaluated. The evaluation is carried out by the teacher in charge of each practice. The report will consist of:

- a. Swine: Technical report that collects the problematic on cases or clinical pictures and/or productive calculations (mortality, conversion rate, average earnings...).
- b. Poultry: technical-productive report of the farms and audit of the situation of the animals.
- c. Bovine: analysis of the cases seen on the farm.
- d. Rabbits: management, pathology and production issues seen on the farm.
- e. Sheep: sanitary program with biosecurity plans and production and pathological issues.

Postmortem Practicum:

1. Compulsory attendance to the necropsy week and (controlled) attendance to 20 sessions of pathological diagnosis. All students will be officially summoned to these 20 sessions, but it is recommended to attend more, to gain experience in the subject. Failure to justify attendance to the 20 sessions will mean taking a practical exam before the theoretical one. Two pathological reports of the cases performed during the week must be made and will be evaluated.
2. A final exam is performed to evaluate the capacity for the morphological diagnosis of lesions and their association to an etiology or a disease. For this purpose, 21 images of pathological specimens representative of organs, species and diseases are projected. Each image is valued with a maximum of 1.5 points. There is no negative marking in this subject.

Valuation

The two blocks must be passed individually. To pass the Livestock Practicum, 50% of the maximum possible is required. To pass the Postmortem Practicum, 60% of the maximum possible is required.

The Livestock Practicum will account for 58% of the total of the course, divided into: ruminants (25%), swine (16.5%), poultry and rabbits (16.5%). In this block, unexcused absences will reduce the grade obtained. In case of missing more than 25% of the activities in a section or subsection, the final grade will be failing.

The Postmortem Practicum will represent 42% of the total of the course. The imaging exam will not be corrected if attendance to the 20 diagnostic sessions is not justified. The practical test will consist of necropsy and issuing morphological diagnoses. The final grade will be constructed with the imaging exam (32%) and the evaluation of the pathology reports (10%).

6. Sustainable Development Goals

- 2 - Zero Hunger
- 3 - Good Health & Well-Being
- 12 - Responsible Production and Consumption