

## 28442 - Clinical Practice: Production Animals

### Syllabus Information

**Academic year:** 2023/24

**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 subject is to apply the knowledge of ruminant, swine, poultry and rabbit integrations, knowledge that constitutes the fundamental basis of 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 subject deals in a practical way with all production species, from intensive breeding to the applied study of their pathologies. This subject is also relevant to public health, zoonotic diseases, and food quality and safety. These approaches and objectives are aligned with the SDGs of the United Nations 2030 Agenda (<https://www.un.org/sustainabledevelopment/es/>) in such a way that the acquisition of the learning results of the subject provides training and competence to contribute to some extent to their achievement.

### 2. Learning results

To know the general characteristics of the livestock sector in Spain, and its situation on a European and world scale. To understand the socioeconomic and structural conditioning factors of animal production and the marketing of its products, with reference to the legislative, geographic, economic, sanitary and environmental frameworks.

Knowledge of production systems and animal handling techniques.

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

To know the various factors that influence the quality of animal products, and be able to determine the causes of the problems that may 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 feed, pasture and forage 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. To 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 preventive and control measures to avoid the appearance of the most important diseases.

To know and understand the reproductive characteristics and mechanisms involved in the labour of production animals, as well as the treatment of problems associated with it, and be able to control and organize the reproductive activity of 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 technical-economic management methods 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 cattle (meat and milk), sheep, swine (including breeders), poultry (laying hens and chickens) and rabbit farms. The Postmortem Practicum consists of performing necropsies of animals referred to the Veterinary Anatomopathological Diagnostic Service, interpreting them and reaching a macroscopic diagnosis. Necropsy reports are to be made on these necropsies. In addition, injury and diagnostic seminars are included throughout the term, with appropriate and complementary content to the practical activities. These seminars are evaluable.

- Dairy cattle: farm visits of 7 hours plus a seminar of 1.5 hours.
- Beef cattle: 6 hours of visits to various farms, and 1 seminar of 1.5 hours duration.

- Sheep: 2 farm visits, each lasting 3.5 hours, and 1 seminar lasting 1 hour each.
- Swine: 2 visits to different farms (9 hours), and 6 hours of seminars aimed at resolving doubts, preparing reports, solving clinical cases, and deepening in certain relevant aspects.
- Poultry (laying hens and chickens) and rabbits. In all cases, 3 visits to different farms of 4 hours each, and 2 seminars of 1.5 hours each, aimed at resolving doubts, preparing reports, solving practical cases, and deepening in certain relevant aspects.
- Necropsies: 10 hours per student of necropsies referred to the Anatomopathological Diagnostic Service of the Faculty of Veterinary Medicine
- Diagnosis of necropsies: 20 hours per student for discussion of clinical cases referred to the Anatomopathological Diagnostic Service of the Faculty of Veterinary Medicine (usually at 13:00).
- Pathological anatomy seminars: 7 online seminars scheduled throughout the term with content appropriate to the activities performed in the necropsy room and other relevant content for the practice of anatomopathological 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 term, through organized and tutored visits.

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

1. Performance of necropsies during one teaching week (two hours/day), including the completion of two reports of cases performed.
2. Anatomopathologic diagnosis: Twenty sessions (of one hour duration) of compulsory and controlled attendance.
3. Seminars: Seven seminars scheduled during the term.

#### 5. Assessment system

Livestock Practicum:

Attendance is mandatory, with active participation in practical visits to livestock farms. An assessment 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 on the problems related to cases or clinical symptoms and production calculations (mortality, conversion rate, average earnings, etc.)
- b. Poultry: technical-productive report on farms and audit of animal status
- c. Bovine: analysis of cases seen on the farm
- d. Rabbits: management, pathology and production issues seen on the farm
- e. Sheep: sanitary program with biosafety plans and production issues and pathological problems

Postmortem Practicum:

1. Compulsory attendance to the necropsy week and to 20 anatomopathological diagnosis sessions. Attendance to 20 of these diagnostic pathology sessions is monitored daily. All students are officially invited to the 20 sessions, but it is recommended to attend more in order to gain knowledge and practice in the subject. Two anatomopathological reports of the cases performed during the week are to be made and evaluated.

2. There will be a final exam to evaluate the ability for morphological diagnosis of lesions and their association to an etiology or disease. For this purpose, 21 images of pathological parts representative of organs, species and diseases are projected, and each image is valued with a maximum of 1.5 points. There are no negative grades in any case.

Valuation

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

The Livestock Practicum will account for 58% of the total subject, divided into: ruminants (25%), swine (16.5%), poultry and rabbits (16.5%). In this block, unexcused absences will reduce the grade obtained. Failure to complete more than 25% of the activities in a section or subsection will result in a fail grade.