

Production and Health of Poultry

Code: 103968
ECTS Credits: 3

Degree	Type	Year	Semester
2502445 Veterinary Medicine	OT	5	0

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

Contact

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Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: Yes
Some groups entirely in Spanish: No

Teachers

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Prerequisites

There are no prerequisites, but it is strongly recommended that the student completed and passed the following subjects:

- Basis of animal production and handling
- Animal Production I and II
- Animal Health II

Objectives and Contextualisation

This is an optional subject taught during the 5th year, once the student must have acquired the basic theoretical knowledge related to the production systems and to the main poultry pathological problems. The objective of this subject is to provide an integrated vision of the poultry production process, emphasizing the characteristics of poultry companies in our country, and above all, to influence the role that the veterinarian has as a professional in this sector and how the veterinarian must be able to identify, analyse and solve problems in the real practice of poultry farming.

Competences

- Analyse, synthesise and resolve problems and make decisions.
- Comunicar la informació obtinguda durant l'exercici professional de manera fluïda, oralment i per escrit, amb altres col·legues, autoritats i la societat en general.
- Demonstrate knowledge and understanding of structural and functional disorders of the animal organism.

- Seek and manage information related with professional activity
- Value and interpret the production and health parameters of one animal group, considering the economic and welfare aspects.
- Work effectively in single or multidisciplinary teams and show respect, appreciation and sensitivity for the work of others.

Learning Outcomes

1. Analyse, interpret and evaluate the production and healthcare parameters of a farm or fishery and produce a plan of corrective actions considering the factors of animal welfare, environmental protection and product quality.
2. Analyse, synthesise and resolve problems and make decisions.
3. Apply livestock farming as a tool for the management and conservation of the territory.
4. Communicate information obtained during professional exercise in a fluid manner, orally and in writing, with other colleagues, authorities and society in general.
5. Seek and manage information related with professional activity
6. Work effectively in single or multidisciplinary teams and show respect, appreciation and sensitivity for the work of others.

Content

THEORETICAL PROGRAM

The theoretical program includes 8 hours in which an integrated vision of the operational activity of poultry companies will be given, emphasizing the characteristics of this sector in our country. We will cover how the poultry productive sector is structured and the main characteristics of the meat sector (breeders, broiler chickens), egg sector (layers) and other minor avian productions (turkeys, partridges, quails, etc.). We will also explain the role played by the veterinarian throughout the production chain in this sector, as well as the main problems and challenges that the professional will have to face.

PROBLEM-BASED LEARNING PROGRAM

In total there will be 3 cases to solve, one for each type of production: a broiler breeder's clinical case, a broiler's clinical case and a layer's clinical case.

Three hours (9 hours of self-learning in total) will be devoted to each case. In the first hour the case will be presented. During the second hour the first part of the case will be discussed and more data and questions will be provided. During the third hour, the students will present and evaluate the final resolution of the case.

PROGRAM OF PRACTICES

There will be three mandatory practices. Two farm visits and a third practice that will be the necropsy of a clinical case:

1. Broiler breeder farm, hatchery and meat chicken farm (4 hrs). The objective of this visit is to see the whole cycle of meat production.
2. Layer farm and egg processing plant (3 hrs). A visit to a layer farm that has different types of production systems (conventional cages, aviary and organic). In the same farm, an egg processing plant can be also visited.
3. Necropsy of a clinical case. (3 hrs). A practice will be performed in which the necropsy of a clinical case will be done with the subsequent assessment and discussion of the macroscopic lesions as well as the taking of samples for further analysis.

Methodology

Self-learning

Theoretical classes

Practices in PVG farms

Learning based on ABP problems

The centre of the learning process is the student's work. The mission of the teaching staff is to help him/her in this task (1) providing information or showing the sources where it can be obtained and (2) directing his/her steps so that the learning process can be done effectively. In line with these ideas, and in accordance with the objectives of the subject, the development of the course is based on the following activities:

1. Master classes TE: The student acquires the basic concepts of the subject attending the master classes and complementing them with the personal study of the topics explained. The master classes are conceived as a fundamentally unidirectional method of transferring the knowledge of the teacher to the student and they usually have ICT support.

2. Cases of self-learning (ABP): problem-based learning or problem solving that the student must develop. The student is provided with the objectives, data and means to solve the problems and clinical cases. In total there will be 3 cases of self-learning.

3. Farm Practices (PVGs) and Necropsy of a clinical case practice: Farm practices are fundamental in this type of subject because they allow the student to directly perceive how the concepts that have been explained in class are applied in practice and allows the student to integrate these concepts. It also allows you to understand and verify first hand the role of the veterinarian in poultry companies. The students must prepare a technical report with the information obtained on the farm. In this activity, the students are accompanied by the teaching staff of the subject and also by own personnel of the farm/company, that also can contribute a different vision to the student. Regarding the practice of necropsy of a clinical case, students will perform a necropsy, which is a practice that is usually performed during farm visits by veterinarians specialized in poultry. Students will be required to prepare a necropsy report stating the medical history, macroscopic findings observed at the necropsy, as well as the lists of differential diagnoses and samples to be taken for further analysis.

The teaching material used in the course will be available on the Campus Virtual Moodle platform. This platform will also be used as a mechanism for the exchange of information and documents between the teaching staff and students.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Farm practices	10	0.4	3
Theoretical lessons	8	0.32	3
Type: Supervised			
Self-learning supervision	9	0.36	1, 2, 5, 6
Type: Autonomous			
Self-learning cases	48	1.92	1, 2, 5, 4, 6

Assessment

Resolution of the case of self-learning

The three clinical cases will worth 75% of the final grade and the active participation in all the activities will be the remaining 25% of the final grade.

For each clinical case, 45% of the mark will be the written reports (15%/case) and the remaining 30% to the presentation of the case.

Participation in all the activities directed will also be valued (25% of the final grade): theoretical classes, learning based on problems and practices in farms/necropsy. In particular, within this 25%, participation, the evaluation group of the cases will mean 10% of the final mark.

If the final mark of one of the self-learning clinical cases is less than 4, students will have to solve another case proposed by the teaching staff. CT1, CT2, CT4 and CT6 will be evaluated in the 3 cases of self-learning.

A minimum attendance of 80% of all face-to-face activities of the subject (theoretical classes, problem-based learning and farm practices) is mandatory in order to be able to pass the subject.

There will be no final exam.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Self-learning cases	75%	0	0	1, 2, 3, 5, 4, 6

Bibliography

- Diseases of Poultry. B.W. Calnek. Iowa State University Press. 13th edition. 2013.
- Chicken Nutrition. R. Kleyn.Ed. Context. 2013
- Atlas de la necropsia aviar. N.Majó y R.Dolz. Ed. Asís. 2011
- Higiene i Patologia Avians. F. Lleonart, E. Roca, M.Callís, A. Gurri, M. Pontes. Reial Escola d'Avicultura. 1991.
- Principles of Poultry Science. S.P Rose. Cab International, 1997.
- Manual d'avicultura (Campus virtual)
- Optimum Egg Quality. A Practical Approach. Coutts, A.J. y Wilson, G.C. 5M Publishing. Reino Unido. 2007.
- Reproducción aviar. ETCHES R.J., Acirba, Zaragoza. 1998.
- Broiler Breeder Production. Leeson y Summers.University Books. 2000.
- Commercial Poultry Nutrition. Leeson y Summers. University Books. 2008.
- Producción de Huevos. Castelló y col. Real Escuela de Avicultura. 2010.

Enllaços web:

- www.wpsa-aeca.com
- <http://217.116.4.219/huevo/institutohuevo/new/default.asp>
- <http://www.huevo.org.es/>
- <http://www.thepoultrysite.com/>
- http://www.fundacionfedna.org/sites/default/files/NORMAS_FEDNA_AVES_2018v.pdf
- <http://www.poultryscience.org/>