



Universitat de Lleida

## DEGREE CURRICULUM

# POULTRY PRODUCTION

Coordination: SERADJ PAKNIYATJAHROMI, AHMAD  
REZA

Academic year 2022-23

## Subject's general information

Subject name	POULTRY PRODUCTION			
Code	102554			
Semester	2nd Q(SEMESTER) CONTINUED EVALUATION			
Typology	Degree	Course	Character	Modality
	Bachelor's Degree in Agricultural and Food Engineering	3	COMPULSORY	Attendance-based
Course number of credits (ECTS)	6			
Type of activity, credits, and groups	Activity type	PRALAB	TEORIA	
	Number of credits	1.5	4.5	
	Number of groups	1	1	
Coordination	SERADJ PAKNIYATJAHROMI, AHMAD REZA			
Department	ANIMAL SCIENCE			
Important information on data processing	Consult <a href="#">this link</a> for more information.			
Language	Spanish			
Distribution of credits	AHMAD REZA SERADJ (5.6 credits) IRENE LÓPEZ HELGUERA (0.4 credits)			

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
LOPEZ HELGUERA, IRENE	irene.lopez@udl.cat	,4	
SERADJ PAKNIYATJAHROMI, AHMAD REZA	reza.seradj@udl.cat	5,6	

## Learning objectives

### The student who passes the course must learn:

The anatomical and physiological aspects of birds.  
 The particularities of the formation of an egg and laying process.  
 The importance of lighting programs for birds in their different phases.  
 The reproductive systems of birds.  
 The technology of artificial incubation. Equipment and emerging systems of poultry production.  
 Poultry feeding, handling and assessment of poultry products.  
 The growing importance of the production of other birds or alternative poultry farming.

### Learning outcomes

Demonstrate theoretical and applied knowledge of the importance and characteristics of the different animal species, racial groupings and their productive aptitudes in order to be able to choose the most appropriate genetic material based on the different possible productive objectives.  
 Design the management plan for the animals of a livestock farm and the plan for the use of the different factors of production.  
 Demonstrate theoretical and applied knowledge on the basis of the functioning and optimization of animal production systems and their repercussions on the environment  
 Evaluate the environmental needs of the animals and plan their implementation.  
 Design the production plan of a livestock farm (Poultry).

## Competences

CB1. That students have demonstrated possession and understanding of knowledge in an area of study that starts from the base of general secondary education, and is usually found at a level that, although supported by advanced textbooks, also includes some aspects that imply knowledge coming from the forefront of their field of study.

CB2. That students know how to apply their knowledge to their work or vocation in a professional way and possess the skills that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study.

CB3. That students have the ability to gather and interpret relevant data (normally within their area of study) to make judgments that include a reflection on relevant issues of a social, scientific or ethical nature.

CB4. That students can transmit information, ideas, problems and solutions to both a specialized and non-specialized audience.

CB5. That students have developed those learning skills necessary to undertake further studies with a high degree of autonomy.

CG1. Capacity for the prior preparation, conception, drafting and signing of projects whose purpose is the

construction, reform, repair, conservation, demolition, manufacture, installation, assembly or exploitation of movable or immovable property that, due to its nature and characteristics, are included in the technique of agricultural and livestock production (facilities or buildings, farms, infrastructures and rural roads), the agri-food industry (extractive, fermentative, dairy, canning, fruit and vegetable, meat, fishing, salting industries and, in general, any other dedicated to the preparation and/or transformation, conservation, handling and distribution of food products) and gardening and landscaping (urban and/or rural green spaces – parks, gardens, nurseries, urban trees, etc.–, public or private sports facilities and environments subjected to landscape recovery).

CG6. Ability to direct and manage all kinds of agri-food industries, agricultural and livestock farms, urban and/or rural green spaces, and public or private sports areas, with knowledge of new technologies, quality processes, traceability and certification and the marketing techniques and commercialization of food products and cultivated plants.

CG7. Knowledge in basic, scientific and technological subjects that allow continuous learning, as well as an ability to adapt to new situations or changing environments.

CG8. Ability to solve problems with creativity, initiative, methodology and critical reasoning.

CEE1 Animal production, protection and exploitation systems. Animal production techniques.

## Subject contents

### Anatomy

- Integumentary System/ Skeletal System
- Muscular System / Cardiovascular System and Respiratory System
- Digestive System / Urinary System
- Nervous System / Endocrine System - photoperiod regulation
- Reproductive System - Male/ Female

Breeds/ Genetic improvement, Meat production and Egg production

Egg formation and the concept of egg quality

Breeders

Artificial incubation

Technical principles of day-old chick quality

Laying Hens

- Breeding-Rebreeding
- Laying/installation-Management-feeding physiology

Broilers, installation-Management, feeding

nutritional diseases

Welfare Concepts

Waste management

### Practical activities

Bird dissection (4h)

Egg quality (4h)

Artificial incubation (2h)

Linear formulation (2h)

Seminars "Alternative poultry farming" (4h)

## Methodology

Type	Description	Attendance time Hours	ECTS
Lecture	Master class, flipped classroom	44	4.4
Practice assignments	Seminars, Laboratory practice, computer tools, problem-based learning, oral discussion	16	1.6
TOTAL		60	6

## Development plan

All sessions will be held in person, virtual or semi-in person according to the recommendations, regulations or restrictions of the health authorities.

Information on the transmission and recording of personal data of the teachers and students of the University of Lleida as a result of teaching at UdL facilities and remotely

The University of Lleida informs that, depending on the changes to which it is forced in accordance with the instructions of the health authorities, the provisions of mobility or the assurance of the quality of teaching, it can transmit, register and use the image, voice or, where appropriate, the physical environment chosen by teachers and students, with the aim of teaching at UdL facilities or remotely.

At the same time, it encourages the people affected so that, in the case of distance teaching, they choose the spaces that have the least impact on their privacy.

And, in general, it is recommended to preferentially opt for chat interactions or without activating the camera, when teaching activities that, due to their characteristics, require oral or visual interaction are not carried out.

The person responsible for the recording and use of this personal data is the University of Lleida -UdL- (contact details of the representative: General Secretariat. Plaza de Víctor Siurana, 1, 25003 Lleida; sg@udl.cat; contact details of the data protection officer: dpd@udl.cat).

These personal data will be used exclusively for the purposes inherent to the teaching of the subject. In particular, the recording fulfills the following functions:

- Offer the possibility of accessing content online and, where appropriate, as an asynchronous training.
- Guarantee access to content for students who, for technological, personal or health reasons, among others, have

not been able to participate.

- Constitute study material for the preparation of the evaluation.

The use of the transmitted data and recordings for other purposes, or in areas outside the Virtual Campus, where they will remain archived, in accordance with the intellectual and industrial property policy of all content included on websites owned by the UdL, is absolutely prohibited. .

If there are any, the recordings will be kept for as long as the subject teacher decides, in accordance with strictly academic criteria, and, at most, they must be deleted at the end of the current academic year, under the terms and conditions provided in the regulations on conservation and elimination of the administrative documents of the UdL, and the document evaluation tables approved by the Government of Catalonia (<http://www.udl.cat/ca/serveis/arxiu/>).

These personal data are essential to teach the subject, and the definition of teaching procedures, especially that which is done remotely, is a power of the UdL within the framework of its right to university autonomy, as provided for in the article 1.1 and article 33.1 of Organic Law 6/2001, of December 21, on universities. For this reason, the UdL does not need the consent of the people affected by transmitting or recording their voice, image and, where appropriate, the physical environment they have chosen, for the sole purpose of teaching the subject.

The UdL will not transfer the data to third parties, except in the cases strictly provided for in the Law.

Affected individuals can access your data; request its rectification, deletion or portability; oppose the treatment and request the limitation, provided that it is compatible with the purposes of teaching, by writing to the address [dpd@udl.cat](mailto:dpd@udl.cat). They can also submit a claim addressed to the Catalan Data Protection Authority, through the electronic headquarters of the Authority (<https://seu.apd.cat>) or by non-electronic means.

## Evaluation

Activity	%	Total
Exam I	30.00%	60.00%
Exam II	30.00%	
Prac. Anatomy	10.00%	40.00%
Prac. Egg Quality	10.00%	
P. Alternative Poultry-Presentation	10.00%	
P. Alternative Aviculture-Content	10.00%	
Sum	100.00%	

The course contains 2 partial exams, E1 and E2 that will be carried out during the semester.

Both exams (E1 and E2) account for 60% of the final grade (30% each exam), the student must obtain (at least) 50% of the grade in each exam (E1 or E2) to be considered "passed", otherwise, s/he must take the make-up exam for each exam (E1 or E2) separately.

The make-up exam for each exam will be considered as 90% of the grade for that exam and the remaining 10% would be the first grade for that exam.

For example, if a student gets 4.5 out of 10 (less than 50%) for the first exam (E1) and gets 8 (out of 10) for the second exam (E2), he or she is required to pass the E1 make-up exam. In the E1 make-up exam, if s/he gets 10 out of 10, the final E1 exam grade will be calculated as follows.

$E1 \text{ grade} = (0.1 \times 4.5) + (0.9 \times 10) = 9.45 \text{ (out of 10)}.$

In addition, the course will take into account the "pop quizzes" that could be done randomly, the marks obtained

from the pop quizzes would be considered as "extra notes", which means that, in case of not participating in surprise exams, the student will not lose any marks.

However, participating students will receive an extra grade (5% of the final grade) that will be added to their final grade.

## Bibliography

ANGULO, E. 2009. Fisiología aviar. Ediciones de la Universidad de Lleida (Eines 65)

Bell, DD & Weaver, WD (eds) 2002, Commercial Chicken Meat and Egg Production, 5th edn, Kluwer Academic Publishers, Mass.

BUXADE, C. 1987. La gallina ponedora. Ed. Mundi-Prensa. Madrid

Etches, RJ. 1996. Reproducción aviar. CAB International, Wallingford, Oxon OX10 8DE, UK.

Leeson, S & Summers, JD 2008, Commercial Poultry Nutrition, 3rd edn, Nottingham University Press, UK.

Normas FEDNA, 2018. Necesidades nutricionales para avicultura.

Solomon, SE. 1997. Egg and Eggshell Quality. Manson Publishing Ltd. London, UK.

<https://www.wpsa-aeca.es/index.php>

<https://cesac.org/>