

Animal Production I

Code: 102625
ECTS Credits: 6

Degree	Type	Year	Semester
2502445 Veterinary Medicine	OB	3	1

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: spanish (spa)
Some groups entirely in English: No
Some groups entirely in Catalan: No
Some groups entirely in Spanish: No

Teachers

Ana Cristina Barroeta Lajusticia
Ramón Casals Costa
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Maria Dolors Izquierdo Tugas
Jordi Bartolomé Filella
Sergio Calsamiglia Blancafort
Ricard Pares Casanova
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Ahmed Salama
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Prerequisites

There are no established official prerequisites, but the student must use the knowledge acquired in the Bases of .

Objectives and Contextualisation

The objectives of Integrated Animal Production 1 are:

- To explain the productive factors that most affect the production and
- The training objectives of Integrated Animal Production 1 are:
- To know the key factors that mark, now and in the future, the produc
 - To know the productive factors that affect the production and quality
 - To know the technical benchmarks and to identify critical points of th
- This subject participates in the Pilot Test of Teaching in English that is ca

(Demonstrate knowledge of English to communicate orally and in writing in academic and professional contexts)

Competences

- Analyse, synthesise and resolve problems and make decisions.
- Demonstrate knowledge and understanding of structural and functional disorders of the animal organism.
- Demonstrate knowledge of English to communicate both orally and in writing in academic and professional contexts.
- Handle the correct protocols and technologies used to modify and optimise different animal production systems.
- Properly evaluate the nutritional status of animals and know how to advise others on breeding and feeding principles.

Learning Outcomes

1. Analyse, synthesise and resolve problems and make decisions.
2. Apply physiological knowledge to production objectives.
3. Demonstrate knowledge of English to communicate both orally and in writing in academic and professional contexts.
4. Describe the concerns of animal waste and its treatment.
5. Evaluate feeding programs: Know how to assess the main methods of animal fodder preparation, conservation and administration.
6. Evaluate the quality of products of animal origin.
7. Evaluate the technical and economic indexes of a farm: recognise problems and offer solutions.
8. Formulate rations for animals in the most conventional situations.
9. Identify and evaluate the factors that affect the production of products of animal origin.
10. Identify the environmental risks associated to the breeding of animal groups.
11. Locate and identify the main producers of foodstuffs of animal origin, as well as their economic dimension.
12. Recognise the basic characteristics of the different stages of livestock production cycles and how they function.
13. Relate agricultural and livestock production with their environmental impacts.
14. Use current feeding systems: Know how to obtain the nutritious value of foodstuffs and calculate animals nutrition requirements.

Content

SUBJECT INTRODUCTION

Overview of Integrated Animal Production. Objectives and organization.

BLOCK 1: MEAT PRODUCTION

Physiological bases of meat production.

Chemical composition, structure and quality of meat. Production factors t

Growth and development:

Growth and development. Animal factors that affect growth and develop

Obtention and characteristics of the carcass

Transport and sacrifice. The channel and its performance. Factors that a

Management of the production of beef:

Planning of the production cycle, feeding and reproduction. Management

Pig meat production management:

Planning of the production cycle, feeding and reproduction. Management

Chicken meat production management:

Planning of the productive cycle, of the feeding and the reproduction. Ma

BLOCK 2: EGG PRODUCTION

Physiological bases of egg formation

Egg formation. Hormonal regulation, ovulatory cycle and photoperiod. Fa

Egg production management

Planning of the production cycle, feeding and reproduction. Management

BLOCK 3: MILK PRODUCTION

Physiological bases of milk production

Composition, characteristics and physico-chemical properties of milk. Mil

Milking

Physiological bases of milking. Basic elements of the operation of the mil

Refrigeration and conservation of milk. Evaluation indexes of the milk obtaining process and corrective measure:

Milk production management

Planning of the production cycle, feeding and reproduction. Management

PRACTICES (21 h)

- Milking machine (Farm)
- Quality of products of animal origin (Laboratory)
- Formulation of monogastric feed (Computer room)
- Formulation of rations-ruminants (Computer room)
- Diagnosis of a problem on the farm. Index analysis (Seminar)

SELF-LEARNING

- Bibliographic study of milk issues
 - Bibliographic study of meat issues
 - Bibliographic study of egg issues
 - Resolution of a case: productive indices
 - Case resolution: milking / slaughter / product quality
 - Discussion of an animal feeding case
- Depending on the restrictions imposed by the health authorities due to th

Methodology

The center of the learning process is the student's work. The student learns by working.

The mission of the teaching staff is to help students in this task (1) by providing information or showing the source. In line with these ideas, and in accordance with the objectives of the subject,

1. Master classes:

The student acquires the knowledge of the subject by attending the master classes.

The master classes are conceived as a fundamentally one-way method of transmitting knowledge from the teacher to the student.

The content of the theory program will be taught in a non-presential format. The material will be available on the virtual platform.

2. Practical training:

Several practical training classes will be carried out in different environments.

Each of them will be used to raise awareness of a specific concept of Animal Production and allows working in different environments.

3. Seminars:

The seminars will allow the presentation and discussion of some aspects

4. Self-learning work:

The student must solve the practical cases and rations presented in each
The proposed teaching methodology may undergo some modification de

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Computer classroom practices	8	0.32	3, 8, 14
Farm practice	3	0.12	9
Lab	2	0.08	6
Seminars	8	0.32	1, 2, 7, 3, 4, 13
Theory lessons	32	1.28	2, 4, 10, 9, 11, 12, 13, 6
Type: Autonomous			
Self-learning	35	1.4	1, 2, 7, 5, 4, 10, 9, 12, 13, 14
Study	60	2.4	2, 7, 5, 4, 8, 10, 9, 11, 12, 13, 14, 6

Assessment

Student's assessment will be done in the following way:

1. Exam of the theoretical and practical contents of the subject (45% and 15%, respectively).
2. Bibliographical study of specific issues (10%): of meat, milk or eggs
4. Formulation of rations (20%).
5. Practices (10%).

Attendance and submission of internship reports is mandatory.

In order to pass the course, it is necessary not to miss more than one practice, to present the reports, cases, rations and self-learning, to obtain a minimum of 4/10 in the theoretical exam and to reach, with all the evaluation activities, a final mark equal or superior to 5.

In the exam period of the last week of the semester, it will be possible to make up for failed examinations or to opt to improve one's mark.

A student who does not take the exam or does not complete the requested exercises and practice reports will be considered as not having taken the exam.

The proposed assessment may undergo some modification depending on the restrictions on attendance imposed by the health authorities.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Exam of practical contents	15%	0.5	0.02	1, 2, 7, 5, 4, 8, 10, 9, 12, 13, 14, 6
Exam of theoretical contents	45%	1.5	0.06	1, 2, 7, 5, 3, 8, 9, 11, 12, 14, 6
Feed formulation	20%	0	0	3, 8, 14
Practices	10%	0	0	1, 2, 7, 5, 4, 10, 13
Self-learning	10%	0	0	1, 2, 7, 5, 4, 10, 9, 12, 13, 14

Bibliography

Meat production

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Animal

British Poultry Science

INRA Productions Animales

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Journal of Dairy Research

Journal of Dairy Science

Meat Science

Mundo Ganadero

Producción Animal

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WEBS

www.agrodigital.com