Information about the subject

Degree: Bachelor of Science Degree in Veterinary Medicine

Faculty: Faculty of Veterinary Medicine and Experimental Sciences

Code: 1262504 **Name:** Specialisation in animal production

Credits: 6,00 **ECTS Year:** 5 **Semester:** 1

Module: Module of elective courses

Subject Matter: Animal Reproduction and Production **Type:** Elective

Department: Animal Production and Public Health

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

Module organization

Module of elective courses

Subject Matter	ECTS	Subject	ECTS	Year/semester
Intensifications per animal group	24,00	Specialisation in Clinic of Wild and Exotic Animals	6,00	5/1
		Specialisation in the Equine Clinic	6,00	This elective is not offered in the academic year 25/26
		Specialisation in treatment of small animals	6,00	5/1
		Surgical pathology of the musculoskeletal system of small animals	6,00	5/1
Animal Reproduction and Production	30,00	Fighting bull	6,00	5/1
		Reproductive Technology	6,00	This elective is not offered in the academic year 25/26
		Specialisation in animal production	6,00	5/1
		Specialisation in animal research	6,00	This elective is not offered in the academic year 25/26
		Specialisation in aquaculture	6,00	This elective is not offered in the academic year 25/26

Feeding	12,00	Microbiology in Food	6,00	This elective is not offered in the academic year 25/26
		Quality management in the agri-food industry	6,00	This elective is not offered in the academic year 25/26

Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

R1	The student participates in work requiring the use of animals for the development of the activity.
R2	The student knows and understands with a critical attitude the concepts that are included in the syllabus/contents of the module of reproduction technology.
R3	The student is able to solve problems related to the contents of the module.
R4	The student is able to produce documents on reproduction and obstetrics, through teamwork.
R5	The student argues according to rational criteria based on his or her work.
R6	The student knows the sanitary, commercial and epidemiological context of animal production in Spain and the EU.
R7	The student is able to describe the major production systems that exist in Spain.
R8	The student applies a program of technical-economic management in a livestock farm.
R9	The student applies the legislation in force in foreign trade of animals and raw materials of animal origin.

Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

BASIC		Weighting			
		1	2	3	4
CB3	Capacity to gather and interpret relevant data usually within their specific field of study and capacity to make judgments that include reflection on relevant social, scientific or ethical issues.				x
CB4	Capacity to communicate information, ideas, problems and solutions at specialist and non-specialist levels.				x
CB5	Capacity to develop those learning skills needed to undertake further studies with a high degree of autonomy.				x

GENERAL		Weighting			
		1	2	3	4
CG0	Capacity to speak well in public.			x	
CG2	Understanding and applying prevention, diagnosis and individual or collective treatment , and control of animal diseases, individually or in groups, with special attention to zoonoses.			x	
CG3	Understanding and applying control of animal breeding, management, health, reproduction, protection, and feed as well as improving production.				x

SPECIFIC		Weighting			
		1	2	3	4
E23	Knowing and applying principles and bases of the description and pathogenesis of general alterations of the structure and function of cells, tissues, organs and systems.	x			
E32	Knowing and applying reproduction, birth and postpartum: care and disease.				x

E33	Knowing and applying assisted reproduction.				x

TRANSVERSAL		Weighting			
		1	2	3	4
T1	Capacity of analysis, synthesis, implementation of knowledge for problem-solving and decision-making.				x
T2	Understanding and applying the scientific method to professional practice including evidence-based medicine.				x
T3	Basic knowledge of the veterinary profession: legal, economic, administrative, planning and time management issues and the veterinarians' society together with the importance of monitoring quality, standardization and protocols of veterinary practice.				x
T4	Mastering fluency in oral and written mother tongue communication, listening and responding effectively using a language appropriate to audience and context.			x	
T5	Knowledge of a second language, preferably English, especially technical vocabulary of veterinary science.			x	
T6	Using information technology to communicate, share, search for, collect, analyze and manage information, especially related to the veterinarian practice.			x	
T7	Ability to adapt to new situations, self-critical ability, being aware of personal limitations and understanding when and where seeking and obtaining advice and professional help.			x	
T8	Efficient and effective work, both independently and as a member of a multidisciplinary team or unit, showing respect, appreciation and sensitivity to the work of others.				x
T9	Keeping an ethical behaviour in the exercise of given responsibilities toward the profession and society.			x	
T10	Ability to learn, to research, and to be aware of the need to keep knowledge updated, and attending training programs.			x	
T11	Ability to work in an international context, appreciating diversity and multiculturalism, through the knowledge of foreign cultures and customs.			x	

Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
	20,00%	Evaluation of the use of the practical lessons in the classroom, of problems or computer science, seminars and tutorials, by means of participation, computer-supported problem solving and the elaboration of the corresponding reports.
	20,00%	Evaluation of the practical laboratory work, which must demonstrate the competences acquired by the student and his or her ability to use them to solve the different situations and problems that arise in a laboratory; this assessment may consist of one of the following methods, or a combination of several of them: an individual written test, the individual or group performance of a laboratory experience, the delivery of an individual or group report on the work carried out in the laboratory.
	20,00%	Evaluation of practical work in a clinic through which the student must demonstrate the competences acquired and the ability to use them to solve the different situations and problems that arise in a clinic; this assessment may involve one of the following methods, or a combination of several of them: a written individual test, the individual or group performance of a clinical experience, the delivery of an individual or group report on the work carried out in the laboratory.
	20,00%	Evaluation of group work through a system of continuous assessment throughout the course based on the delivery of assignments the objectives and content of which will be proposed by the teacher.

20,00%	Evaluation of activities in which the student must do some research individually and structure information related to each of the topics through a system of continuous assessment throughout the course based on the delivery of papers, the objectives and contents of which will be proposed by the teacher.

Observations

This course is not eligible for single evaluation. According to the general evaluation and qualification regulations, the preferred evaluation system will be continuous evaluation.
Attendance at practical sessions is mandatory.
The use of artificial intelligence (AI)-based tools is subject to the discretion of the teacher, who may establish specific limits or conditions depending on the training or assessment activity.
CRITERIA TO GRANT THE HONORIFIC MENTION: At the teacher's discretion, an honorific mention may be awarded for every 20 students (not for a fraction of 20; except for the first 20 students). -The honorific mention can only be granted in the first call of the first year of matriculation of the student in the course. -The teacher may award honorific mention to any of the students who have obtained a minimum grade of 9 out of 10 in the course.

MENTION OF DISTINCTION:
In accordance with the regulations governing the assessment and grading of subjects in force at UCV, the distinction of "Matrícula de Honor" (Honours with Distinction) may be awarded to students who have achieved a grade of 9.0 or higher. The number of "Matrículas de Honor" (Honours with Distinction) may not exceed five percent of the students enrolled in the group for the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case a single "Matrícula de Honor" (Honours with 9 Distinction) may be awarded. Exceptionally, these distinctions may be assigned globally across different groups of the same subject. Nevertheless, the total number of distinctions awarded will be the same as if they were assigned by group, but they may be distributed among all students based on a common criterion, regardless of the group to which they belong. The criteria for awarding "Matrícula de Honor" (Honours with Distinction) will be determined according to the guidelines stipulated by the professor responsible for the course, as detailed in the "Observations" section of the evaluation system in the course guide.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

M1 On-site training activity aimed primarily at acquiring knowledge acquisition skills. It is characterised by the fact that students are spoken to. Also called master class or exposition, it refers to the oral presentation made by the teacher, (with the support of blackboard, a computer and a projector for the display of texts, graphs, etc.), in front of a group of students. They are expository, explanatory or demonstrative sessions of contents. The size of the group is determined by the limit or physical capacity of the classroom; therefore, it is a single group.

M2 On-site training activity aimed primarily at obtaining knowledge application and research skills. Knowledge is built through interaction and activities. The activity consists of supervised monographic sessions with shared participation (teachers, students, experts). The size of the group is variable, from one large group to various small groups, with a minimum of 6 students to ensure interaction. The evaluation will be based on follow-up records kept by the teacher. Participation and the development of the capacity to problematize should be taken into account.

M3 On-site group-work training activity oriented toward problem solving under the supervision of a teacher. It would correspond to "Animal-free supervised practical work", type e1, from the European evaluation of EAEVE. The size of the group is variable, in a range of 10 to 20 students, to differentiate it from a master class.

M6 On-site training activity in groups carried out in the laboratory. It includes the sessions where the students develop laboratory experiments, make dissections or use the microscopes for the study of histological or histopathological samples actively and autonomously, under the supervision of the professor. It also includes work with healthy animals, objects, products, corpses (e.g., animal handling, bacteriological practices, physiology or biochemistry, meat inspection, etc.). It would correspond to the "Supervised practical non-clinical animal work" type e2 of the European evaluation of EAEVE. The size of the group is variable, in a range of 10 to 20 students.

M7 On-site training activity that is defined as the clinical practical work developed in the Veterinary Clinical Hospital or clinical centres ascribed to the University, as well as itinerant clinical practices, mainly with ruminants, equids, pigs, birds and aquatic animals. Also included are necropsies, surgical workshops and training in clinical examination techniques or diagnosis with healthy patients. In these practical sessions the student will always work with animals, which can be healthy (e.g. propaedeutic or obstetrics) or clinical cases (individual or collective), including a protocol or work scheme, being supervised by a teacher and assuming the provision of a service. This type of training corresponds to type e3 of the EAEVE European evaluation called "Clinical Training" (strickly hands-on)". The size of the group will be 5 students or fewer.

M8 A set of on-site training activities carried out by the teacher to provide personalised attention to the student or in small groups with the aim of reviewing and discussing the materials and topics presented in classes, seminars, readings, carrying out projects, etc. The aim is to ensure a truly comprehensive education of the student rather than a mere transfer of information. It is, therefore, a personalized assistance relationship in which the tutor assists, facilitates and guides one or more students in the learning process.

M9 Set of processes that attempt to evaluate the learning outcomes of students expressed in terms of acquired knowledge, capacities, skills or abilities developed and manifested attitudes. It covers a wide range of activities that can be developed for students to demonstrate their training (e.g. written, oral and practical tests, projects or assignments). It also includes the Official Calls.

M11 Autonomous training activities related to personal study, or the preparation of individual course assignments. The individual preparation of readings, essays, problem solving, papers, reports, etc. will be evaluated through presentations or submissions during theoretical classes, practical classes, seminars and/or tutorials. The evaluation of the submitted papers will consider the structure of the paper, the quality of the documentation, originality, spelling and presentation.

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Theoretical lessons (TL) M1	R1, R2, R3, R4, R5, R6, R7, R8, R9	30,00	1,20
Seminars (S) M3	R1, R2	31,00	1,24
In-Classroom Practice (ICP) M8	R3	65,00	2,60
Tutorial M8	R2, R4	4,00	0,16
TOTAL		**130,00**	**5,20**

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
Group work M8	R1, R4, R5	5,00	0,20
Individual work M11	R3	15,00	0,60
TOTAL		**20,00**	**0,80**

Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
TU 4. INTENSIFICATION OF SMALL RUMINANT PRODUCTION	Reproductive management Productive yields and technical indices Animal identification and traceability. Design of facilities Livestock movements
TU 2. INTENSIFICATION IN BOVINE PRODUCTION	Bovine feeding Design of installations Management of breeding in dairy cattle. Management of dairy farms. Audit of dairy farm.
TU 3. INTENSIFICATION OF PIG PRODUCTION	Reproductive planning and technical indices. Exploitation design Neonatal piglet management. Control of piglets in maternity Control of the lactating sow
TU 1. UPDATE ON ANIMAL PRODUCTION	Veterinary medicines: health and commercial problems. Traceability in animal production. Institutional support for livestock production. Animal feeding legislation. Animal welfare. Animal health: epidemiological surveillance and control plans.

Organization of the practical activities:

	Content	Place	Hours
PR1.	INTENSIFICATION IN BOVINE PRODUCTION P1. Management of breeding in dairy cattle. P2. Management of dairy farms. Dairy farm audit. P3. Management of calf feedlots.	Field visit	6,00
PR2.	INTENSIFICATION OF SWINE PRODUCTION. P1. Technical visit to a pig farm in a closed cycle: maternity, transition, bait, feed mill and slurry management. P2. Neonatal piglet management. P3. Piglet control in maternity I. P4. Piglet control in maternity II. P5. Control of the lactating sow I. P6. Control of the lactating sow II.	Farm	7,00
PR3.	INTENSIFICATION IN PRODUCTION OF SMALL RUMINANTS P1. Reproductive management I. P2. Reproductive management II. P3. Control of performance in lambs. P4. Animal identification and traceability. P5. Technical visit to a dairy sheep farm. P6. Transhumance activity.	Farm	6,00

Temporary organization of learning:

Block of content	Number of sessions	Hours
TU 4. INTENSIFICATION OF SMALL RUMINANT PRODUCTION	22,00	44,00
TU 2. INTENSIFICATION IN BOVINE PRODUCTION	14,00	28,00
TU 3. INTENSIFICATION OF PIG PRODUCTION	14,00	28,00
TU 1. UPDATE ON ANIMAL PRODUCTION	15,00	30,00

References

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Understanding animal breeding. Richard M. Bourdon . -Harlow [Inglaterra] : Pearson , 2014
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WEBS DE INTERÉS

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