Information about the subject

Degree: Bachelor of Science Degree in Veterinary Medicine

Faculty: Faculty of Veterinary Medicine and Experimental Sciences

Code: 1265002 **Name:** Specialisation in the Equine Clinic

Credits: 6,00 **ECTS Year:** The course is not offered this academic year **Semester:** 1

Module: Module of elective courses

Subject Matter: Intensifications per animal group **Type:** Elective

Department: Animal Medicine and Surgery

Type of learning: Classroom-based learning

Languages in which it is taught:

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 23/24
		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	This elective is not offered in the academic year 23/24
		Reproductive Technology	6,00	This elective is not offered in the academic year 23/24
		Specialisation in animal production	6,00	5/1
		Specialisation in animal research	6,00	This elective is not offered in the academic year 23/24
		Specialisation in aquaculture	6,00	This elective is not offered in the academic year 23/24

Feeding	12,00	Microbiology in Food	6,00	This elective is not offered in the academic year 23/24
		Quality management in the agri-food industry	6,00	This elective is not offered in the academic year 23/24

Recommended knowledge

To have slight knowledge of Biology, Anatomy, Pathophysiology and General Pathology and Clinical equine

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 searches bibliographic information from different sources and knows how to analyse it with a critical and constructive spirit.

R2 The student is able to write documents related to the subject and work in a team.

R3 The student argues according to rational criteria based on his or her work.

R4 The student knows and understands with a critical attitude the concepts that are included in the syllabus/contents of the module of reproduction and obstetrics.

R5 The student is able to solve problems related to the contents of the module.

R6 The student knows how to use different working techniques in the laboratory and interpret the results.

R7 The student is able to work at an animal reproduction laboratory correctly performing the basic operations in both the planning and the development of each of the laboratory practices

R8 The student is able to write a comprehensible and organized text on various aspects of reproduction and obstetrics in the veterinary field.

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
CB2	Capacity to apply knowledge to work or occupation in a professional way and have the competences that are proved by preparing and arguing topics and problem-solving in their specific field of study.				x
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	

SPECIFIC		Weighting			
		1	2	3	4
E24	Knowing and applying methods and procedures of clinical examination, additional diagnostic techniques and their interpretation.			x	
E25	Knowing and applying imaging diagnostic and radiation biology.			x	
E27	Knowing and applying recognition and diagnosis of different types of injuries and their association with pathological processes.		x		

E28	Knowing and applying the clinical study of patients and medical, surgical or hygienic-dietary treatments required, as well as sporadic diseases affecting groups.			x	
E29	Knowing and applying diagnosis.			x	
E30	Knowing and applying surgical techniques used in veterinary.		x		
E31	Knowing and applying animal anesthesia and resuscitation.	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	

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

The written test represents 60% of the final grade. It will be necessary to obtain a minimum of 5/10 to overcome this part. For this, an exam on theoretical knowledge will be developed. Failure to pass the theoretical part will make it impossible for the subject to be approved as a whole.
Attendance at practices is considered mandatory. During the practical sessions the Professor will control the attendance and attitude of each student. Factors such as attention, degree of participation and interest shown during practice will be taken into account. The practical evaluation will include any aspect related to the practices carried out during the academic year. Also, this evaluation may contain questions that the student must answer orally. The favorable result of the evaluation of the practices will be an indispensable requirement to pass the subject. Failure to pass this block will mean the impossibility of passing the theoretical part of the subject.
For the final grade, the results of the different evaluation activities are weighted. To pass the subject, it will be necessary to obtain, at a minimum, a grade equal to or greater than 50 points out of 100 in each of the evaluation items and in the final grade of the course.
Review of exams: after the publication of the notes, the student will have the exam review schedules published on the intranet to review his exam, unless specifically indicated otherwise by the teaching staff, outside these hours will not show the exams Those students who for different reasons do not attend the evaluation of some of the parties on the official date of the calls, the extraordinary evaluation may be carried out by means of an oral examination

MENTION OF DISTINCTION:
According to Article 22 of the Regulations governing the Evaluation and Qualification of UCV Courses, the mention of "Distinction of Honor" may be awarded by the professor responsible for the course to students who have obtained, at least, the qualification of 9 over 10 (“Sobresaliente”). The number of "Distinction of Honor" mentions that may be awarded may not exceed five percent of the number of students included in the same official record, unless this number is lower than 20, in which case only one "Distinction of Honor" may be awarded.

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.

M10 Autonomous training activity, including activities and coursework, bibliographic searches. The results obtained from unsupervised group and teamwork will be evaluated, with particular attention paid at the time of evaluation to the acquisition of specific knowledge development skills through group work.

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.

M12 On-site training activity consisting of an independent clinical rotation with a final assessment of competencies, in university veterinary hospitals, itinerant clinics, farms, pilot plants, departments with devices intended for practical teaching in the degree of veterinary, as well as stays in veterinary slaughterhouses, companies and external agencies in the veterinary or related fields.

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Theoretical lessons (TL) M1	R3, R4, R5, R6	50,00	2,00
Seminars (S) M2	R1, R3, R4, R5	17,50	0,70
In-Classroom Practice (ICP) M3, M6	R1, R6	25,00	1,00
Laboratory Practice (LP) M6	R6, R7	5,00	0,20
Clinical Practice (CP) M7	R6, R7	15,00	0,60
Tutorial M8	R3, R4	10,00	0,40
Evaluation (Ev) M9	R2, R3, R4, R5, R6, R7, R8	12,50	0,50
TOTAL		**135,00**	**5,40**

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
Group work M10	R8	7,50	0,30
Individual work M11	R1, R8	7,50	0,30
TOTAL		**15,00**	**0,60**

Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
UD1. Introduction to equine health and clinical medicine	T1. Introduction to equine clinic
UD2. Clinical Analysis	T1. Reference values for adult horses and foals T2. Study of the erythrogram. Anemia and polycythemia T3. Study of the leukogram T4. Alterations of hemostasis
UD3. Anesthesia	T1. Pharmacology. anesthetic protocols T2. Anesthetic blocks. Neurectomy
UD4. Musculoskeletal	T1. Laminitis T2. Disease of the hock and the stifle joint T3. Tendinitis and desmitis T4. articular pathologies T5. Myoglobinuria. rhabdomyolysis
UD5. Dermatology	T1. Main skin diseases and treatments
UD6. Gastrointestinal	T1. Differential diagnosis of dysphagia in horses. T2. Colic syndrome T3. Gastric pathologies T4. Small intestine diseases T5. Pathologies of the large intestine T6. Colic Pain T7. Differentiation between medical and surgical colic T8. Colic syndrome Complications
UD7. Urinary and hepatic	T1. Diagnostic approach the horse with urinary pathologies T2. Acute and chronic renal failure T3. Urinary tract infections and obstructive processes of the urinary tract T4. Liver Pathologies

UD8. Reproduction	T1. Examination of the male reproductive and female T2. Pathologies of the estrous cycle of the mare. Pathologies post mating or artificial insemination T3. Pathophysiology of pregnancy I. The first quarter. Pathophysiology of pregnancy II. Common causes of abortions T4. Pathophysiology of parturition. Exploration of the neonate and passive immunity. Peripartum diseases in the mare. The postpartum. Most common complications T5. Comprehensive reproductive management of stud farm
UD9.Cardiac and Respiratory	T 1 Diagnostic approach the horse with hearth pathologies T2 Vascular pathology T3 Heart failure T4 Patologías del pericardio T5 Myocarditis T6 Endocarditis and valvulopathy T7 Arrhythmias T8 Diagnostic approach the horse with respiratory pathologies T9 Upper respiratory tract diseases T10 Non infectious diseases of the respiratory system T11 Pathologies of the pleura T12 Infectious diseases of the respiratory system
U10. Ambulatory clinic	T.1 Mobile clinic

Organization of the practical activities:

	Content	Place	Hours
PR1.	Anesthetic protocol	Equine hospital	2,00
PR2.	Locomotor surgery	Equine hospital	2,00
PR3.	Reproduction surgery	Equine hospital	2,00
PR4.	Neurologic exam	Equine hospital	2,00

Temporary organization of learning:

Block of content	Number of sessions	Hours
UD1. Introduction to equine health and clinical medicine	2,00	4,00
UD2. Clinical Analysis	2,00	4,00
UD3. Anesthesia	1,50	3,00
UD4. Musculoskeletal	4,00	8,00
UD5. Dermatology	2,00	4,00
UD6. Gastrointestinal	6,00	12,00
UD7. Urinary and hepatic	3,00	6,00
UD8. Reproduction	4,00	8,00
UD9.Cardiac and Respiratory	7,00	14,00
U10. Ambulatory clinic	36,00	72,00

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