Information about the subject

Degree: Bachelor of Science Degree in Veterinary Medicine

Faculty: Faculty of Veterinary Medicine and Experimental Sciences

Code: 1262507 **Name:** Specialisation in Clinic of Wild and Exotic Animals

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

Module: Module of elective courses

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

Department: -

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 24/25
		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 24/25
		Specialisation in animal production	6,00	This elective is not offered in the academic year 24/25
		Specialisation in animal research	6,00	This elective is not offered in the academic year 24/25
		Specialisation in aquaculture	6,00	This elective is not offered in the academic year 24/25

Feeding	12,00	Microbiology in Food	6,00	This elective is not offered in the academic year 24/25
		Quality management in the agri-food industry	6,00	This elective is not offered in the academic year 24/25

Recommended knowledge

It is strongly recommended to have previously studied the subjects of "Diagnostic techniques I and II", "Surgery I and II", Clinic and Health in Wild and Exotic Animals, Companion animals clinic.

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 performs a correct anamnesis and collection of relevant data for the resolution of clinical cases.
R2	The student correctly identifies the main injuries and is able to define the main diagnostic-oriented problems.
R3	The student is able to define the differential diagnoses for each problem in order of priority and in a critical manner.
R4	The student knows and understands the main tests, their preparation, interpretation and evaluation in a critical way.
R5	The student is able to define a diagnosis (presumptive or definitive) as well as a therapeutic protocol and recommendations for the owner.
R6	The student knows and understands the anatomy and physiology of exotic animals.
R7	The student knows how to perform a complete clinical exploration, adapting it to the different taxonomic groups.
R8	The student is able to collect biological samples and process them.
R9	The student is able to establish a diagnostic plan in order to make a diagnostic judgement.
R10	The student knows the prophylaxis and hygienic-dietary or medicine therapy of the main diseases of exotic animals.
R11	The student is able to issue a prognosis, assessing the evolution of the pathology studied.
R12	The student searches bibliographic information from different sources and knows how to analyse it with a critical and constructive spirit.
R13	The student is able to write documents related to the subject and work in a team.
R14	The student is able to perform basic surgical techniques/basic anesthetic procedures on exotic animals.
R15	The student knows and understands the concepts and terminology presented in the module.

R16 The student correctly applies the principles of asepsis and antisepsis.

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
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
	0,00%	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.
	30,00%	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.

30,00%	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

Attendance at **lectures**/**practice sessions** is mandatory. The assessment of practical activities constitutes 30% of the final mark. During the practical sessions, the professor will check the theoretical knowledge, correct identification of physical findings and practical skills. Factors such as, participation and interest showed during practice will be considered. Students, individually or in groups, will present scientific papers and/or clinical cases. Also, this evaluation may contain questions that the student must answer orally/written before each practice. The favorable outcome of the evaluation of the practices will be essential to pass the course requirement

The evaluation will be carried out through a continuous evaluation system, through different tests throughout the course. Students who do not pass through the continuous evaluation system will be evaluated through a written exam and a practical exam on the second call.

Criteria for granting the license plate of Honor: For the teacher may be granted an honors degree for every 20 students (not fraction of 20, except for the first 20 students)
- Only be awarded honors in first or second call of the first year of enrollment of students in the subject.
- The professor may grant honors to one of the students who have earned an honor degree in the course.

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	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R15	60,00	2,40
Seminars (S) M2	R1, R2, R3, R4, R5, R6, R9, R10, R11, R12, R13, R15	5,00	0,20
Clinical Practice (CP) M7	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R14, R15, R16	65,00	2,60
TOTAL		**130,00**	**5,20**

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
Group work M10	R2, R4, R6, R11, R12, R13, R15	10,00	0,40
Individual work M11	R1, R2, R3, R4, R6, R11, R12, R13	10,00	0,40
TOTAL		**20,00**	**0,80**

Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
CONSERVATION MEDICINE	Introduction to ecopathology Tracking and capturing wildlife animals Pathologies in wildlife animals The veterinarian in hunting activity
EXOTIC ANIMAL MEDICINE. BIRDS	Anesthesia and advanced monitoring in avian patiens. Surgery and anesthesia in avian patients. Emergency and intensive care in birds. Main pathologies in avian patients.
EXOTIC ANIMAL MEDICINE. SMALL MAMMALS	Anesthesia and monitoring in small mammals. Surgical techniques in small mammals. Emergency and intensive care medicine in small mammals. Main pathologies and interpetration of dianostic tests in small mammals.
EXOTIC ANIMAL MEDICINE. REPTILES	Anesthesia and monitoring in reptiles. Surgical techniques in reptiles. Emergency and intensive care medicine in reptiles. Main pathologies and interpetration of dianostic tests in reptiles.

Organization of the practical activities:

	Content	Place	Hours
PR1.	Minimally invasive procedures and anesthesia in rabbits (blood collection, nasogastric tube placement, IV catheters, intubation techniques…)	Drylab	5,00
PR2.	Minimally invasive procedures and anesthesia in reptiles (blood collection, esophageal tube placement, IV catheters, intubation techniques…)	Drylab	5,00
PR3.	Surgical techniques 1: Traumatology and soft tissues in birds. Minimally invasive procedures (catheter placement)	Drylab	5,00
PR4.	Surgical techniques 2: Ovariohysterectomy and castration in mammals (cadavers)	Drylab	5,00
PR5.	Surgical techniques 2: Ovariohysterectomy and castration in mammals (live animals)	Drylab	4,00
PR6.	Surgical techniques 3. Dentral trimming and dental extraction in rabbits	Drylab	5,00
PR7.	Technical visit. Valencian Hunting Reserve Muela de Cortes. Wild rabbit and ibex	Field visit	14,00
PR8.	Rotation, “el Saler” recovery center. During which clinical procedures and necropsies will be performed	Field visit	8,00

Temporary organization of learning:

Block of content	Number of sessions	Hours
CONSERVATION MEDICINE	14,00	28,00
EXOTIC ANIMAL MEDICINE. BIRDS	13,00	26,00
EXOTIC ANIMAL MEDICINE. SMALL MAMMALS	26,00	52,00
EXOTIC ANIMAL MEDICINE. REPTILES	12,00	24,00

References

GENERAL BIBLIOGRAPHY
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- Harrison, G. and Lightfoot, T. 2005. Clinical Avian Medicine Volumes I & II, 1st edition
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- Mader,D. 2007. Reptile Medicine and Surgery 2nd ed. ELSEVIER
- McArthur. 2008. Medicine and Surgery of Tortoises and Turtles BLACKWELL
- Meredith & Delaney. 2010. BSAVA Manual of Exotic Pets, 5th Edition. British Small Animal Veterinary Association. Iowa State University Press
- Keeble E, Meredith A. 2009. BSAVA Manual of rodents and Ferrets. British Small Animal Veterinary Association. Iowa State University Press
- Meredith A, Lord B. 2014. BSAVA Manual of rabbit medicine. British Small Animal Veterinary Association. Iowa State University Press
- Harcourt-Brown F, Chitty J. 2013. BSAVA Manual of rabbit surgery, dentistry and imaging. British Small Animal Veterinary Association. Iowa State University Press
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- O'Malley B. 2007. Anatomía y fisiología clínica de animales exóticos Editorial Servet. Zaragoza
- Paterson, S. 2008. Skin Diseases of Exotic Pets. WILEY-BLACKWELL
- Quesenberry, K. 2012. Ferrets rabbits and rodents: clinical medicine and surgery. ELSEVIER
- Fox, JG. 2014. Biology and Diseases of the Ferret. WILEY-BLACKWELL
- Ritchie, B., Harrison, G. y Harrison, L. 1997. Avian Medicine: Principles and Application
- Aguirre, A. 2002. Conservation Medicine: Ecological Health in Practice. Oxford University Press
- Valls y Verges. 2012. Casos clínicos de animales exóticos. Servet
- West / Heard / Caulkett. 2013. Zoo Animal and Wildlife Immobilization and Anesthesia. WILEY-BLACKWELL
- Orós, J. 2008. Atlas de Patología en reptiles. Intermédica
- Aguilar & Hernández. 2010. Atlas de Medicina de Animales Exóticos. Intermédica
- Williams, D. 2012. Ophthalmology of Exotic Pets. WILEY-BLACKWELL
- Wobeser, GA. 2005. Essentials of Diseases in Wild Animals, Blackwell Publishing

WEBS
Lafeber.com

JOURNALS
Journal of wildlife disease
Veterinary Clinics of North America (Exotic Animals)
Journal of Exotic Pet Medicine
Journal of Avian Medicine and Surgery

Addendum to the Course Guide of the Subject

Due to the exceptional situation caused by the health crisis of the COVID-19 and taking into account the security measures related to the development of the educational activity in the Higher Education Institution teaching area, the following changes have been made in the guide of the subject to ensure that Students achieve their learning outcomes of the Subject.

Situation 1: Teaching without limited capacity (when the number of enrolled students is lower than the allowed capacity in classroom, according to the security measures taken).

In this case, no changes are made in the guide of the subject.

Situation 2: Teaching with limited capacity (when the number of enrolled students is higher than the allowed capacity in classroom, according to the security measures taken).

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject will be made through a simultaneous teaching method combining onsite teaching in the classroom and synchronous online teaching. Students will be able to attend classes onsite or to attend them online through the telematic tools provided by the university (videoconferences). In any case, students who attend classes onsite and who attend them by videoconference will rotate periodically.

In the particular case of this subject, these videoconferences will be made through:

[X] Microsoft Teams

[ ] Kaltura

Situation 3: Confinement due to a new State of Alarm.

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:

X	Microsoft Teams
	Kaltura

Explanation about the practical sessions:

The clinical practices will be carried out online. Videos and images will be used to explain the clinical procedures. They will be done through Teams and CAMPUS-UCV.
The presentation of clinical cases and works will be carried out through Teams (oral presentation) and CAMPUS-UCV (resolution of questionnaires).

2. System for Assessing the Acquisition of the competences and Assessment System

ONSITE WORK

Regarding the Assessment Tools:

[X] The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.

[ ] The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

Comments to the Assessment System: