



Information about the subject

Degree: Bachelor of Science Degree in Veterinary Medicine

Faculty: Faculty of Veterinary Medicine and Experimental Sciences

Code: 1263503 **Name:** Supervised Clinical Practice and Clinical Rotation

Credits: 24,00 **ECTS Year:** 5 **Semester:** 2

Module: Module of Supervised Internship and Degree's Final Project

Subject Matter: Internship **Type:** Internship

Department: Animal Production and Public Health

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

1265A	<u>Paula Fatima Navarro Martínez</u> (Responsible Lecturer)	pf.navarro@ucv.es
	<u>Alba Rodriguez Mengod</u>	alba.rodriguez@ucv.es
	<u>Alvaro Cervera Saiz</u>	alvaro.cervera@ucv.es
	<u>Celia Almela Camañas</u>	celia.almela@ucv.es
	<u>Daniel Machancoses Ramón</u>	daniel.machancoses@ucv.es
	<u>Ester Corman Herrera</u>	ester.corman@ucv.es
	<u>Iris Garcia Bacete</u>	iris.garcia@ucv.es



1265A	<u>Joel Bueso Rodenas</u>	joel.bueso@ucv.es
	<u>Jose Sansano Maestre</u>	jose.sansano@ucv.es
	<u>Julio Sedeño Zanón</u>	julio.sedeno@ucv.es
	<u>Miguel Fabregas Dittmann</u>	miguel.fabregas@ucv.es
	<u>Sofia Ingesa Capaccioni</u>	sofia.ingresa@ucv.es
	<u>Xavier Valdecabres Torres</u>	xavier.valdecabres@ucv.es
1266D	<u>Paula Fatima Navarro Martínez</u> (Responsible Lecturer)	pf.navarro@ucv.es
	<u>Alba Rodriguez Mengod</u>	alba.rodriguez@ucv.es
	<u>Alvaro Cervera Saiz</u>	alvaro.cervera@ucv.es
	<u>Celia Almela Camañas</u>	celia.almela@ucv.es
	<u>Daniel Machancoses Ramón</u>	daniel.machancoses@ucv.es
	<u>Ester Corman Herrera</u>	ester.corman@ucv.es
	<u>Iris Garcia Bacete</u>	iris.garcia@ucv.es
	<u>Joel Bueso Rodenas</u>	joel.bueso@ucv.es
	<u>Jose Sansano Maestre</u>	jose.sansano@ucv.es
	<u>Julio Sedeño Zanón</u>	julio.sedeno@ucv.es
	<u>Miguel Fabregas Dittmann</u>	miguel.fabregas@ucv.es
	<u>Sofia Ingesa Capaccioni</u>	sofia.ingresa@ucv.es
	<u>Xavier Valdecabres Torres</u>	xavier.valdecabres@ucv.es



Module organization

Module of Supervised Internship and Degree's Final Project

Subject Matter	ECTS	Subject	ECTS	Year/semester
Internship	24,00	Supervised Clinical Practice and Clinical Rotation	24,00	5/2
Final Degree Project	6,00	Bachelor's Thesis	6,00	5/2

Recommended knowledge

Those acquired throughout the Degree



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 understands the implication of the figure of the veterinary surgeon in Public Health and in the food industry.
- R2 The student is able to identify and establish quality criteria for a product both prior to its use and as an end product.
- R3 The student relates the handling of animals and their health status with the quality of the product that is going to enter a technological process.
- R4 The student identifies the main physical, chemical and microbiological hazards that can occur throughout the manufacturing process of the different products.
- R5 The student is capable of establishing criteria and having a critical attitude towards anomalous situations that may arise.
- R6 The student understands the different types of contamination that can occur in food in order to prevent the risk of food poisoning.
- R7 The student is able to perform a good risk assessment and design an HACCP plan.
- R8 The student identifies the main legislation and knows different ways of locating the specific legislation for each sector.
- R9 The student is able to carry out a specialty consultation, with its complementary tests and treatments.
- R10 The student performs a basic surgical and anesthetic procedure correctly.
- R11 The student correctly interprets the complementary image tests and the laboratory tests.
- R12 The student is able to analyze and synthesize information obtained from various sources.
- R13 The student is able to solve in a creative and effective way the problems that arise in daily practice.
- R14 The student is able to organize, plan and work effectively in interdisciplinary teams.
- R15 The student is able to identify care needs arising from health problems.



- R16 The student is able to perform veterinary care techniques and procedures, establishing a therapeutic relationship in animal production.
- R17 The student is able to select interventions aimed at treating or preventing problems arising from health deviations.
- R18 The student is able to guarantee the right to animal welfare.





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
CG1	Knowing and applying hygiene control, inspection, technology for the production and processing of food for human use from primary production to consumer.				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
CG4	Understanding and applying methods and processes for obtaining efficient animal products under optimal conditions and costs, and assessing environmental impacts.				X



CG5	Understanding and applying laws, regulations and administrative provisions in all areas of the veterinary profession and public health, understanding the ethical implications of health in a changing global context.					X
CG6	Developing professional practice, acquiring skills related to teamwork, with an efficient use of resources and quality management.					X
CG7	Identifying emerging risks in all areas of the veterinary profession.				X	

SPECIFIC		Weighting				
		1	2	3	4	
E69	Being able to acquit oneself in a pre-professional veterinary environment, using veterinary tools, solving situations within their scope of responsibility and expertise, and interacting with colleagues, customers or suppliers.					X
E71	Knowing and applying veterinary principles and methodologies as well as the acquisition of skills and competences described in the general objectives of the degree.					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
T6	Using information technology to communicate, share, search for, collect, analyze and manage information, especially related to the veterinarian practice.				X	



Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18	100,00%	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.

Observations

·**Pre-professional Rotations (50%):** R-1, R-2, R-3, R-4, R-5, R-6, R-7, R-8, R-9, R-10, R-11; R-12; R-13; R-14; R-15, R-16, R-17, R-18

The objective of the pre-professional rotation program is to provide students with an opportunity to undertake training internships where they can face professional situations similar to those they will encounter in their future work after completing their undergraduate studies. Practice sessions will be offered at the University's Veterinary Clinical Hospital, covering various services related to small animal clinics and equine clinics. The Rotations in Medicine and Clinical Surgery include rotations among different services at the Small Animal Hospital of the UCV. The rotation will last for five weeks, and students will be assigned to each service until they complete the total rotation across different services, guided by the professor and supported by hospital staff. Evaluation will be based on the student's daily presence and continuous assessment of achieving the established competencies in each rotation. At the end of the week, a clinical case presentation will be conducted for each service.

In the field of animal production, practices will take place at the teaching farm, faculty laboratories, as well as in ambulatory activities related to ruminants. A series of activities will be proposed in which the student must integrate the knowledge and competencies acquired throughout their academic training. Evaluation will be based on the student's daily presence and continuous assessment.

Practices in the area of food inspection and control will be conducted in the faculty's laboratories. Additionally, students will receive training in quality management systems and food safety to gain the necessary knowledge for conducting audits, considering the protocols established in the International Food Standard (IFS) and British Retail Consortium (BRC) regulations. The final grade



of the student will be determined through progressive evaluation of the competencies acquired during the internship period, considering continuous assessment of the activities performed, as well as the completion of a report with the results of the work conducted.

Individual autonomous work will be evaluated based on individual preparation of readings, essays, problem-solving, papers, reports, etc., to be presented or submitted in seminars and/or tutorials.

The evaluation of the presented work will take into account its structure, quality of documentation, originality, spelling, and presentation.

The grade for this block will correspond to the weighted average of each part.

·**Supervised External Practices (50%):** R-1, R-2, R-3, R-4, R-5, R-6, R-7, R-8, R-9, R-10, R-11, R-12, R13, R14, R-15, R-16, R-17, R-18.

This rotation will take place during 8 weeks at external sites chosen by the student outside the University.

The development of this period will depend on two different mentors:

·Internal mentor, responsible for coordinating the relationship between the student, the university, and the external company. The internal mentor will evaluate this period after the student presents an external report, which will constitute 50% of the final grade.

·External mentor, responsible for coordinating the student's activity at the company during the external practice period. The other 50% of the grade will correspond to the evaluation by this external mentor.

An unjustified absence from a practice session will result in a grade of 0 in the specific block in which the student is enrolled.

The professor may grant honors to some of the students who have obtained an outstanding grade in the subject.

To pass the subject of Supervised Practices and Clinical Rotation, it is necessary to obtain a **minimum score of 5 out of 10 in each block independently.**

Criteria for Honors: At the professor's discretion, an honors grade can be awarded for every 20 students (not for a fraction of 20, except for the first 20 students). The student must pass each module independently to pass the subject.

Honors can only be awarded in the first or second examination period of the student's first year in the subject.



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:

- 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.
- 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
Seminars (S) M8	R5	24,00	0,96
Tutorial M8	R12, R13, R14, R15, R16, R17, R18	4,00	0,16
Evaluation (Ev) M9	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18	4,00	0,16
Pre-professional internship M12	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18	476,00	19,04
TOTAL		508,00	20,32

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
Group work M10	R12, R13, R14, R15, R16, R17, R18	12,00	0,48
Individual work M11	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18	80,00	3,20
TOTAL		92,00	3,68



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
Rotatory Food Safety and Bromatology	The practices in the area of food inspection and control will be carried out in the faculty's laboratories. Additionally, the student will receive training in quality management systems and food safety to acquire the necessary knowledge to conduct audits, taking into account the protocols established in the regulations of the International Food Standard (IFS) and the British Retail Consortium (BRC).
Rotatory Medicine and Clinical Surgery	<ul style="list-style-type: none">·Anesthesia in small animals.·Internal Medicine.·ICU/Emergency.·Diagnostic Imaging.·Surgery in small animals.·Cardiorespiratory.·Equine Clinic.



Rotatory Animal Production and Health

Block Ruminants

- Genetics and Feeding.
- Reproduction.
- Solving practical cases of feeding and ration preparation.
- Evaluation of productive health programs and analysis of the main causes of economic losses, morbidity, and mortality in livestock farms.
- Diagnostic imaging, resolution of clinical cases.
- Animal identification.
- Health and productivity assessment.
- Gestation diagnosis.
- Farm management and productivity.
- Nutritional assessment and rationing.
- Application of health programs.

Block Laboratory Diagnosis

- Sample collection.
- Detection and isolation of pathogens of interest in animal production.

Block Ambulatory Clinic

- Clinic in external livestock farms. Resolution of clinical cases.

Supervised External Practices

Practices to be developed in the entity chosen by the student supervised by the external Tutor and by the UCV Tutor

Supervised external practices II

Practices to be developed in the entity chosen by the student supervised by the external Tutor and by the UCV Tutor

Orientation Service Seminars: professional insertion

- Workshop on Curriculum Vitae and Cover Letter Preparation.
- Workshop on Job Interview Preparation.
- Workshop on Professional and Personal Skills for the Job Market (Soft Skills).
- Workshop on Job Search and Career Opportunities.

External Practices Coordination Seminar

External Practices procedure explanation.

Communication skills seminars by the University Psychology Service

- Communication with clients: how to transmit bad news
- Social skills



Organization of the practical activities:

	Content	Place	Hours
PR1.	Bovine Production	Farm	35,00
PR2.	Laboratory Diagnostic	Laboratory	20,00
PR3.	Ambulatory Clinic	Field visit	40,00
PR4.	Small animal anesthesia and dermatology	Hospital	135,00
PR5.	Inspection and control in slaughterhouses, inspection and control in food industries, inspection and control in companies of collective catering, inspection and control at border inspection points, microbiological analysis of food and / or design and implementation of guides of good hygiene practices.	Technical visit	40,00
PR6.	Supervised external practices	Technical visit	270,00
PR7.	Equine clinic	Field visit	8,00



Temporary organization of learning:

Block of content	Number of sessions	Hours
Rotatory Food Safety and Bromatology	20,00	40,00
Rotatory Medicine and Clinical Surgery	67,50	135,00
Rotatory Animal Production and Health	62,50	125,00
Supervised External Practices	67,50	135,00
Supervised external practices II	67,50	135,00
Orientation Service Seminars: professional insertion	1,00	2,00
External Practices Coordination Seminar	2,00	4,00
Communication skills seminars by the University Psychology Service	3,00	6,00



References

- Buncic, S. Seguridad alimentaria integrada y salud pública veterinaria. Acribia. 2009
- Calvo Carrillo, MC, Méndez Martínez. Toxicología de los alimentos. MC Graw-Hill, 2010
- Dugdale V. Veterinary Anaesthesia: Principles to Practice. Willey-Blackwell. Oxford. 2010.
- Ettinger SJ, Feldman EC. Tratado de Medicina Interna Veterinaria. 6ª Ed. Elsevier. Madrid. 2007.
- Fossum TW. Small Animal Surgery. 3rd Ed. Mosby Elsevier. Missouri (USA). 2007
- Gustavo A. Palma. Biotecnología de la reproducción. Ed. Agro-Veterinaria.2009
- Jackson, P. Handbook of Veterinary Obstetrics. 2nd edition. Editorial Saunders. 2004
- McGavin, D y Zachary, J.F. Pathologic Basis of Veterinary Disease. Editorial Elsevier. 2017
- Mosby Elsevier. St. Louis. Missouri. USA. 2012.
- Montes E, Lloret I, López MA. Diseño y gestión de cocinas. manual de higiene alimentaria y aplicada al sector de la restauración. Editorial Díaz de Santos, 2009.
- Seymour C, Gleed R. Manual of Small Canine and Feline Anaesthesia and Analgesia. BSAVA. 2007.
- Slatter D. Tratado de Cirugía en Pequeños Animales (4 vol). 3rd Ed. Elsevier. USA. 2003.
- Tobias KM, Johnston SA. Veterinary Surgery. Small Animal. 1st Ed. Elsevier & Saunders. Missouri (USA). 2012.
- Urquhart G.M. 2001. Parasitología Veterinaria (traducción de Dª Caridad Sánchez Acedo).
- Zaragoza: Ed. Acribia. 2001