



UNIVERSIDAD
DE MURCIA

UM Veterinary School



Appendices

For EAEVE re-accreditation



February 12-16, 2024

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APPENDIX 1

Current academic staff, qualifications, their FTE, teaching responsibilities and departmental affiliations.

Departmental affiliation: Veterinary Comparative Anatomy and Pathology					
Last name	First name	Qualification	PhD	FTE	Teaching responsibilities
Ayala Florenciano	María Dolores	Associate Professor	PhD	Full-time	Anatomy II, Anatomy & Histology Central Nervous System (CNS) & Embryology
Bernabé Salazar	Antonio	Full Professor	PhD	Full-time	Microscopic Anatomy & Histology, Practicum
Buendía Marin	Antonio J.	Associate Professor	PhD	Full-time	General Pathological Anatomy, Special Pathological Anatomy, Practicum
Gil Cano	Francisco	Full Professor	PhD	Full-time	Anatomy & Histology Central Nervous System (CNS) & Embryology, Veterinary History
Gómez Sánchez	Miguel Ángel	Associate Professor	PhD	Full-time	Special Pathological Anatomy, Farm Animal Clinics, Practicum
Latorre Reviriego	Rafael M.	Full Professor	PhD	Full-time	Anatomy I
López Albors	Octavio M.	Full Professor	PhD	Full-time	Anatomy I
Martínez Gomariz	Francisco	Professional Associate Professor	PhD	Part-time	Anatomy I, Anatomy II, Taurology
Navarro Cámara	José Antonio	Full Professor	PhD	Full-time	Microscopic Anatomy & Histology, Anatomy & Histology Central Nervous System (CNS) & Embryology, Practicum
Párraga Ros	Ester	Contracted Associate Professor	PhD	Full-time	Microscopic Anatomy & Histology, Special Pathological Anatomy, Practicum
Ramírez Zarzosa	Gregorio J.	Full Professor	PhD	Full-time	Anatomy II, Anatomy & Histology Central Nervous System (CNS) & Embryology
Sánchez Campillo	Joaquín	Full Professor	PhD	Full-time	General Pathological Anatomy, Special Pathological Anatomy, Practicum
Sánchez Collado	Cayetano	Professional Associate Professor	PhD	Part-time	Anatomy I, Anatomy II
Sánchez Martínez	Pedro	Professional Associate Professor	PhD	Part-time	Special Pathological Anatomy
Seva Alcaraz	Juan	Full Professor	PhD	Full-time	Special Pathological Anatomy, Taurology, Farm Animal Clinics, Practicum
Vázquez Autón	José María	Full Professor	PhD	Full-time	Anatomy II, Anatomy & Histology Central Nervous System (CNS) & Embryology

Departmental affiliation: Animal Medicine and Surgery					
Last name	First name	Qualification	PhD	FTE	Teaching responsibilities
Agut Giménez	Amalia	Full Professor	PhD	Full Time	Imaging Diagnosis, Practicum
Arana Sánchez	Rafael	Professional Associate Professor		Part time	Farm Animal Clinics, Practicum
Ayala de la Peña	Ignacio	Full Professor	PhD	Full Time	Medical Pathology, Farm Animal Clinics, Practicum
Barranco Cascales	Isabel	Researcher	PhD	Full Time	Reproduction & Obstetrics
Bayon del Río	Alejandro Angel	Associate Professor	PhD	Full Time	Medical Pathology, Farm Animal Clinics, Practicum
Belda Mellado	Eliseo	Associate Professor	PhD	Full Time	Veterinary Anaesthesia, Practicum
Bernal Gambín	Luis Jesús	Associate Professor	PhD	Full Time	Medical Pathology, Nosology & Physiopathology, Practicum
Carrillo Sánchez	Juana Dolores	Assistant Professor	PhD	Full Time	General Surgical Pathology & Surgery, Special Surgical Pathology & Surgery
Cerón Madrigal	José Joaquín	Full Professor	PhD	Full Time	Nosology & Physiopathology, Veterinary Clinical Pathology, Practicum
Contreras Aguilar	María Dolores	Contracted Associate Professor	PhD	Full Time	Medical Pathology
Cuello Medina	Cristina	Associate Professor	PhD	Full Time	Reproduction & Obstetrics, Farm Animal Clinics, Practicum
Fernández del	Josefa	Full Professor	PhD	Full Time	Medical Pathology, Animal Farm Clinic,

Palacio					Practicum
García Martínez	Juan Diego	Collaborate Professor	PhD	Full Time	Medical Pathology, Farm Animal Clinics, Practicum
Gil Corbalán	María Antonia	Full Professor	PhD	Full Time	Reproduction & Obstetrics, Farm Animal Clinics, Practicum
González Arostegui	Luis G.	Researcher	No	Full Time	Clinical Propaedeutics
Gutiérrez Montes	Ana María	Associate Professor	PhD	Full Time	Clinical Propaedeutics, Animal Farm Clinic, Practicum
Gutiérrez Panizo	Cándido	Emeritus Professor	PhD	Full Time	Propaedeutic, Farm Animal Clinics, Practicum
Laredo Álvarez	Francisco Ginés	Full Professor	PhD	Full Time	Veterinary Anaesthesia, Farm Animal Clinics, Practicum
Lucas Arjona	Xiomara	Associate Professor	PhD	Full Time	Reproduction & Obstetrics, Practicum
Martínez García	Emilio Arsenio	Full Professor	PhD	Full Time	Reproduction & Obstetrics, Practicum
Martínez Subiela	Silvia	Full Professor	PhD	Full Time	Clinical Propaedeutics, Veterinary Clinical Pathology, Practicum
Matas Quintanilla	Marta	Researcher	No	Full Time	Clinical Propaedeutics
Muñoz Prieto	Alberto	Researcher	PhD	Full Time	Nosology & Physiopathology, Medical Pathology, Veterinary Clinical Pathology, Farm Animal Clinics
Murciano Pérez	José	Associate Professor	PhD	Full Time	General Surgical Pathology & Surgery, Special Surgical Pathology & Surgery, Practicum
Pardo Marín	Luis	Researcher	No	Full Time	Clinical Propaedeutics
Parrilla Riera	Inmaculada	Full Professor	PhD	Full Time	Reproduction & Obstetrics, Practicum
Peres Rubio	Camila	Researcher	PhD	Full Time	Nosology & Physiopathology, Medical Pathology, Veterinary Clinical Pathology, Farm Animal Clinics
Roca Aleu	Jordi	Full Professor	PhD	Full Time	Reproduction & Obstetrics, Practicum
Sánchez-Valverde García	Miguel Ángel	Full Professor	PhD	Full Time	General Surgical Pathology & Surgery, Special Surgical Pathology & Surgery, Practicum
Soler Laguía	Marta	Associate Professor	PhD	Full Time	Imaging Diagnosis, Practicum
Sotillo Mesanza	Juan	Associate Professor	PhD	Full Time	Clinical Propaedeutics, Farm Animal Clinics, Practicum
Talavera López	Jesús	Associate Professor	PhD	Full Time	Medical Pathology, Farm Animal Clinics, Practicum
Tecles Vicente	Fernando	Associate Professor	PhD	Full Time	Clinical Propaedeutics, Veterinary Clinical Pathology, Practicum
Tovar Sahuquillo	María Carmen	Associate Professor	PhD	Full Time	General Surgical Pathology & Surgery, Special Surgical Pathology & Surgery, Practicum
Tvarijonavičute	Asta	Associate Professor	PhD	Full Time	Clinical Propaedeutics, Medical Pathology, Veterinary Clinical Pathology, Farm Animal Clinics
Zilberschein Juffe	Jose Mario Juan	Collaborate Professor	PhD	Full Time	General Surgical Pathology & Surgery, Special Surgical Pathology & Surgery, Farm Animal Clinics, Practicum

Departmental affiliation: Animal Health

Last name	First name	Qualification	PhD	FTE	Teaching responsibilities
Alonso de Vega	Francisco D.	Full Professor	PhD	Full Time	Parasitic Diseases, Practicum
Amores Iniesta	Joaquín	Assistant Professor	PhD	Full Time	Epidemiology, Zoonosis & Public Health, Infectious Diseases I & II, Preventive Medicine & Health Policy, Practicum
Bereziuk Frolova	Elena	Researcher	No	Full Time	Infectious Diseases II
Berriatua Fernández de Larrea	Eduardo	Full Professor	PhD	Full Time	Parasitic Diseases, Practicum
Caro Vergara	María Rosa	Full Professor	PhD	Full Time	Microbiology I, II & Immunology, Practicum
Contreras de Vera	Antonio	Full Professor	PhD	Full Time	Epidemiology, Zoonosis & Public Health, Preventive Medicine & Health Policy, Practicum
Corrales Romero	Juan Carlos	Associate Professor	PhD	Full Time	Infectious Diseases I & II, Preventive Medicine & Health Policy, Wild Fauna Ecopathology, Practicum
Cubero Pablo	María José	Full Professor	PhD	Full Time	Preventive Medicine & Health Policy, Practicum
Cuello Gijón	Francisco	Emeritus Professor	PhD	Full Time	Microbiology I, II & Immunology, Practicum
de la Fe Rodríguez	David	Associate Professor	PhD	Full Time	Infectious Diseases II, Wild Fauna Ecopathology,

	Christian				Practicum
del Río Alonso,	Laura	Associate Professor	PhD	Full Time	Parasitic Diseases, Practicum
Gallego Ruíz	María del Carmen	Associate Professor	PhD	Full Time	Preventive Medicine & Health Policy, Practicum
González Candela	Monica Eva	Associate Professor	PhD	Full Time	Infectious Diseases I & II, Wild Fauna Ecopathology, Practicum
Goyena Salgado	María Elena	Professional Associate Professor	PhD	Part time	Parasitic Diseases, Infectious Diseases I & II, Practicum
Martínez-Carrasco Pleite	Carlos	Associate Professor	PhD	Full Time	Parasitic Diseases, Wild Fauna Ecopathology, Practicum
Muñoz Ruíz	María del Pilar	Associate Professor	PhD	Full Time	Infectious Diseases I & II, Parasitic Diseases, Preventive Medicine & Health Policy, Practicum
Ortega Hernández	Nieves	Contracted Associate Professor	PhD	Full Time	Microbiology I, II & Immunology
Ruíz de Ybáñez Carnero	María del Rocío	Associate Professor	PhD	Full Time	Parasitology, Wild Fauna Ecopathology, Practicum
Salinas Lorente	Lázaro Jesús	Full Professor	PhD	Full Time	Microbiology I, II & Immunology, Practicum
Sánchez López	Antonio	Associate Professor	PhD	Full Time	Epidemiology, Zoonosis & Public Health, Wild Fauna Ecopathology, Practicum
Verdú Serrano	María Elena	Contracted Associated Professor	PhD	Part Time	Parasitology, Infectious Diseases I & II, Parasitic Diseases

Departmental affiliation: Animal Production

Last name	First name	Qualification	PhD	FTE	Teaching responsibilities
Burguete Toral	María Isabel	Associate Professor	PhD	Full Time	Genetics
Escribano Tortosa	Damián	Contracted Associate Professor	PhD	Full Time	Ethnology and Animal Handling, Ethology, Animal Welfare and Animal Protection, Animal Husbandry, Farm Facilities & Welfare
Hernández Ruipérez	Fuensanta	Full Professor	PhD	Full Time	Animal Nutrition
Hevia Méndez	María Luisa	Associate Professor	PhD	Full Time	Ethnology and Animal Handling, Ethology, Animal Welfare and Animal Protection
Madrid Sánchez	Josefa	Full Professor	PhD	Full Time	Animal Nutrition, Practicum
Martínez Miró	Silvia	Associate Professor	PhD	Full Time	Animal Nutrition, Animal Breeding & Welfare, Animal Husbandry & Health, Practicum
Megías Rivas	María Dolores	Full Professor	PhD	Full Time	Agronomy, Practicum
Muñoz Luna	Antonio	Full Professor	PhD	Full Time	Animal Breeding & Welfare, Animal Husbandry & Health
Orengo Femenía	Juan	Associate Professor	PhD	Full Time	Animal Nutrition, Taurology, Practicum
Otal Salaverri	Julio	Associate Professor	PhD	Full Time	Ethnology and Animal Handling, Animal Husbandry, Farm Facilities & Welfare
Quiles Sotillo	Alberto José	Associate Professor	PhD	Full Time	Animal Husbandry, Farm Facilities & Welfare
Ramírez de la Fe	Antonio Rafael	Associate Professor	PhD	Full Time	Ethnology and Animal Handling, Animal Husbandry, Farm Facilities & Welfare, Practicum
Ramís Vidal	Manuel Guillermo	Associate Professor	PhD	Full Time	Animal Breeding & Welfare, Animal Farm Clinic, Animal Husbandry & Health, Practicum
Sánchez Gallego	María Josefa	Professional Associate Professor	PhD	Part Time	Ethnology and Animal Handling, Agronomy, Animal Husbandry, Farm Facilities & Welfare, Practicum
Rouco Yáñez	Antonio José	Associate Professor	PhD	Full Time	Agrarian Economy, Statistics and Business (Management & Marketing), Practicum

Departmental affiliation: Food technology, Human Nutrition and Food Science

Last name	First name	Qualification	PhD	FTE	Teaching responsibilities
Álvarez Álvarez	Daniel	Professional Associate Professor	PhD	Full Time	Food Technology, Practicum
Bañón Arias	Sancho	Associate Professor	PhD	Part Time	Food Technology
Buendía Moreno	Laura	Professional Associate Professor	PhD	Part Time	Food Technology
Díaz Molins	Pedro	Professional	PhD	Part Time	Food Hygiene, Inspection & Control I, Food

		Associate Professor			Hygiene, Inspection & Control II,
Egea Clemenz	Macarena	Assistant Professor	PhD	Part Time	Food Technology, Food Security, Practicum
Esteban Maestre	M ^a Dolores	Professional	PhD	Part Time	Food Technology, Practicum
		Associate Professor			
Garrido Fernández	M ^a Dolores	Full Professor	PhD	Part Time	Food Technology
Jiménez Román	Jorge	Professional	PhD	Part Time	Food Hygiene, Inspection & Control II
	Mariano	Associate Professor			
Linares Padierna	M ^a Belén	Contracted	PhD	Full Time	Food Technology, Practicum
		Associate Professor			
López Fernández	María	Professional	PhD	Part Time	Food Hygiene, Inspection & Control I,
	Amparo	Associate Professor			
López Gálvez	Francisco	Assistant Professor	PhD	Full Time	Food Technology
López Morales	Belén	Associate Professor	PhD	Full Time	Food Technology
Martínez Gracia	Carmen	Full Professor	PhD	Full Time	Food Hygiene, Inspection & Control I & II, Practicum
Martínez Tomé	Magdalena	Associate Professor	PhD	Full Time	Food Hygiene, Inspection & Control II, Practicum
Núñez Gómez	Vanessa	Contracted	PhD	Full Time	Food Hygiene, Inspection & Control I
		Associate Professor			
Ortuño Casanova	Jordi	Professional	PhD	Part Time	Practicum
		Associate Professor			
Peñaranda Verdú	Irene	Researcher	No	Full Time	Food Technology
Periago Castón	M ^a Jesús	Full Professor	PhD	Full Time	Food Hygiene, Inspection & Control I, Food Security
Peso Echarrí	Patricia	Professional	PhD	Part Time	Food Hygiene, Inspection & Control I
		Associate Professor			
Ros Berruezo	Gaspar	Full Professor	PhD	Full Time	Food Hygiene, Inspection & Control I & II, Practicum
	Francisco				
Ros García	José María	Associate Professor	PhD	Full Time	Food Technology
Santaella Pascual	Javier	Professional	PhD	Part Time	Food Hygiene, Inspection & Control II, Practicum
		Associate Professor			
Suarez Martínez	Clara	Researcher	No	Full Time	Food Hygiene, Inspection & Control II

Departmental affiliation: Biochemistry and Molecular Biology A

Last name	First name	Qualification	PhD	FTE	Teaching responsibilities
Aranda Martínez	Francisco J.	Full Professor	PhD	Full Time	Biochemistry
Fernández Belda	Francisco	Full Professor	PhD	Full Time	General and Molecular Biology
Ortiz López	Antonio	Full Professor	PhD	Full Time	Physics and Chemistry
Pérez Sánchez	M ^a Dolores	Researcher	PhD	Full Time	Physics and Chemistry/Biochemistry
Soler Pardo	Fernando	Full Professor	PhD	Full Time	General and Molecular Biology/Biochemistry
Teruel Puche	José Antonio	Full Professor	PhD	Full Time	Physics and Chemistry/Biochemistry

Departmental affiliation: Pharmacology

Last name	First name	Qualification	PhD	FTE	Teaching responsibilities
Cárceles Rodríguez	Carlos M.	Full Professor	PhD	Full Time	Pharmacy & Pharmacology, Practicum
Escudero Pastor	Elisa	Full Professor	PhD	Full Time	Pharmacy & Pharmacology, Pharmacotherapy, Practicum
Espuny Miró	Alberto	Professional	PhD	Part Time	Pharmacy & Pharmacology,
		Associate Professor			

Departmental affiliation: Physiology

Last name	First name	Qualification	PhD	FTE	Teaching responsibilities
Abril Parreño	Laura	Researcher	No	Full Time	Veterinary Physiology I, II
Coy Fuster	María Pilar	Full Professor	PhD	Full Time	Veterinary Physiology I, II
Gadea Mateos	Joaquín	Full Professor	PhD	Full Time	Veterinary Physiology I, II
García Vázquez	Francisco	Associate Professor	PhD	Full Time	Veterinary Physiology I, II
	A.				
Heras García	Sonia	Researcher	PhD	Full Time	Veterinary Physiology I, II
Luongo	Chiara	Contracted Professor	No	Full Time	Veterinary Physiology I, II
Matás Parra	Carmen	Full Professor	PhD	Full Time	Veterinary Physiology I, II
Piñeiro Silva	Cela	Intern	No	Full Time	Veterinary Physiology I, II

Quintero Moreno	Armando Arturo	Contracted Professor	PhD	Full Time	Veterinary Physiology I, II
Romar Andrés	Raquel	Associate Professor	PhD	Full Time	Veterinary Physiology I, II
Romero Aguirregomezcorta	Jon	Researcher	PhD	Full Time	Veterinary Physiology I, II
Ruiz López	Salvador	Full Professor	PhD	Full Time	Veterinary Physiology I, II

Departmental affiliation: Socio-Sanitary Science

Last name	First name	Qualification	PhD	FTE	Teaching responsibilities
García Fernández	Antonio Juan	Full Professor	PhD	Full Time	Deontology, Legal Medicine & Veterinary Legislation, Toxicology, Practicum
Jerez Rodríguez	Silvia	Professional Associate Professor	PhD	Part Time	Toxicology, Practicum
Jiménez Montalbán	Pedro Javier	Professional Associate Professor	PhD	Part Time	Deontology, Legal Medicine & Veterinary Legislation, Toxicology, Practicum
María Mojica	Pedro	Professional Associate Professor	PhD	Part Time	Toxicology, Practicum
Martínez López	Emma	Associate Professor	PhD	Full Time	Toxicology, Practicum
Motas Guzmán	Miguel	Associate Professor	PhD	Full Time	Deontology, Legal Medicine & Veterinary Legislation, Toxicology, Practicum
Navas Ruiz	Isabel M ^a	Professional Associate Professor	PhD	Part Time	Toxicology
Peñalver García	José	Professional Associate Professor	PhD	Part Time	Toxicology
Romero García	Diego	Associate Professor	PhD	Full Time	Deontology, Legal Medicine & Veterinary Legislation, Toxicology, Practicum

Departmental affiliation: Zoology and Physical Anthropology

Last name	First name	Qualification	PhD	FTE	Teaching responsibilities
Galián Abaladejo	José	Full Professor	PhD	Full Time	General and Molecular Biology
Ortiz Cervantes	Antonio Salvador	Associate Professor	PhD	Full Time	General and Molecular Biology
Serrano Marino	José	Emeritus Professor	PhD	Full Time	General and Molecular Biology
Soler Pardo	Fernando	Full Professor	PhD	Full Time	General and Molecular Biology

Departmental affiliation: Statistics and Operational Research

Last name	First name	Qualification	PhD	FTE	Teaching responsibilities
Fernández Hernández	José	Full Professor	PhD	Full Time	Statistics and Business (Management & Marketing)
Fernández Hernández	Pascual	Associate Professor	PhD	Full Time	Statistics and Business (Management & Marketing)
Marín Pérez	Alfredo	Full Professor	PhD	Full Time	Statistics and Business (Management & Marketing)
Martínez Riquelme	Carolina	Contracted Associate Professor	PhD	Full Time	Statistics and Business (Management & Marketing)

Departmental affiliation: Physics/Applied Physics

Last name	First name	Qualification	PhD	FTE	Teaching responsibilities
Jerez Rodríguez	Sonia	Researcher	PhD	Full Time	Physics and Chemistry
Ortuño Ortín	Miguel	Full Professor	PhD	Full Time	Physics and Chemistry

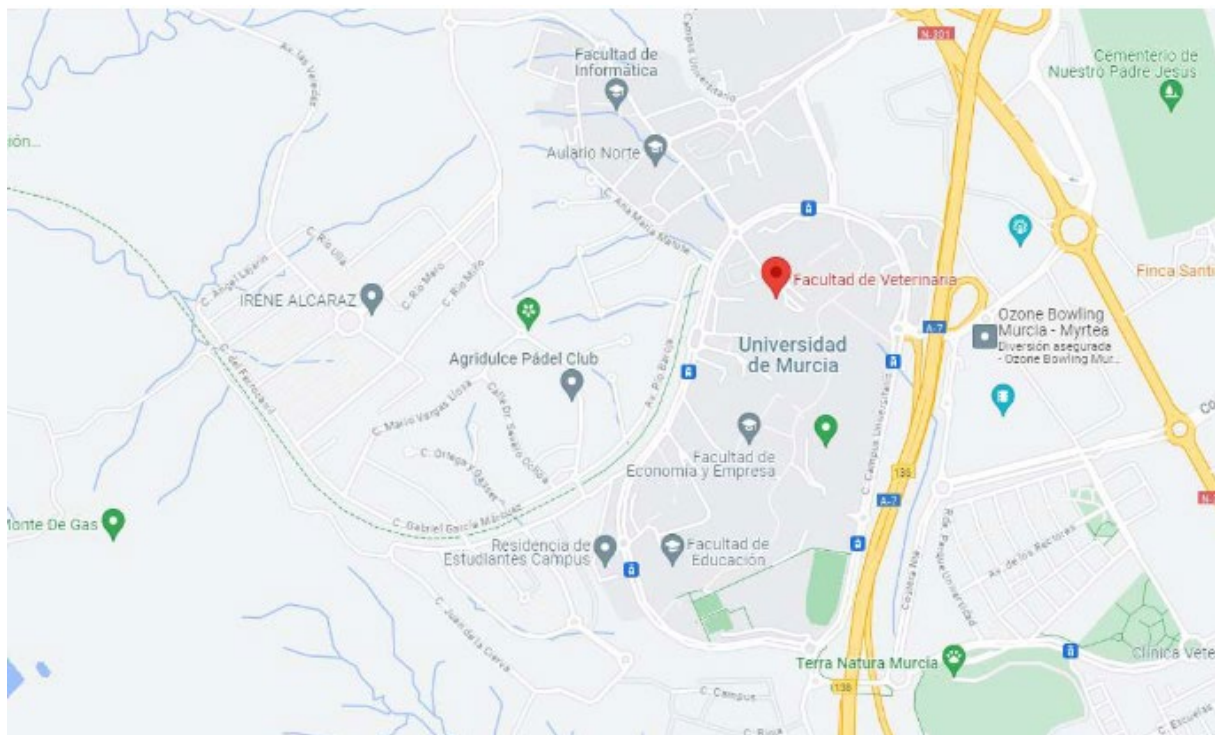
APPENDIX 2

Maps of the Establishment and the intra-mural and extra-mural facilities used in the core veterinary programme.

Main Building FVETUM



Espinardo Campus



Espinardo Campus



Veterinary Teaching Farm (VTF)



Veterinary Teaching Farm (VTF)



Veterinary Teaching Farm (VTF)



Veterinary Teaching Hospital (VTH)



Veterinary Anatomy Museum (VAM)

APPENDIX 3 Core veterinary programme.

APPENDIX 3.1.

Organisation of Core and Elective subjects by semester (1-10) and number of ECTS of the Veterinary Degree at FVETUM.

CORE	SUBJECTS	Semester	ECTS
<i>Statistics & Business</i>	Statistics & Business (Management & Marketing)	1	6
<i>Physics & Chemistry</i>	Physics & Chemistry	1	6
<i>Biology</i>	General & Molecular Biology	1	6
<i>Biochemistry</i>	Biochemistry	1	6
<i>Animal Anatomy</i>	Anatomy I	1	6
	Anatomy II	2	6
	Microscopic Anatomy & Histology	2	6
	Anatomy & Histology Central Nervous System (CNS) & Embryology	3	6
<i>Physiology</i>	Veterinary Physiology I	2	6
	Veterinary Physiology II	3	6
<i>Genetics</i>	Genetics	2	6
<i>Identification, Animal Welfare, Ethics & Professional Legislation</i>	Deontology, Legal Medicine & Veterinary Legislation	2	3
	Ethnology and Animal Handling	3	4.5
	Ethology, Animal Welfare and Animal Protection	4	4.5
<i>Biological Agents of Disease Structural & Functional Disorders</i>	Microbiology I	3	4.5
	Microbiology II & Immunology	4	6
	Parasitology	3	4.5
	Nosology & Physiopathology	4	6
	General Pathological Anatomy	4	3
<i>Basics of Diagnosis & Therapeutics</i>	Propaedeutics	5	6
	Pharmacy and pharmacology	5 & 6	6
	Special Pathological Anatomy	5 & 6	9
	Diagnostic Imaging	6	4.5
	Pharmacotherapy	7	4.5
<i>Clinical Sciences</i>	Veterinary Anaesthesiology	6	4.5
	General Surgical Pathology & Surgery	7	4.5
	Medical Pathology	7 & 8	12
	Reproduction & Obstetrics	7 & 8	12
	Farm Animal Clinics	9	3
	Special Surgical Pathology & Surgery	9	6
<i>Animal Health</i>	Epidemiology, Zoonosis & Public Health	4	6
	Infectious Diseases I	5	4.5
	Infectious Diseases II	6	4.5
	Parasitic Diseases	5 & 6	9
	Toxicology	6	6
	Preventive Medicine & Health Policy	9	6
<i>Animal Husbandry</i>	Agronomy	2	3
	Animal Nutrition	3 & 4	9
	Animal Husbandry, Farm Facilities & Welfare	7 & 8	9
	Agrarian Economy	8	3
	Animal breeding & Welfare	9	6
<i>Hygiene, Security & Food Technology</i>	Food Technology	7 & 8	9
	Food Hygiene, Inspection & Control I	8	6
	Food Hygiene, Inspection & Control II	9	6
	Food Security	9	3
<i>Practicum & Final Degree Project</i>	Practicum	10	24
	Final Degree Project	10	6
ELECTIVES (6 ECTS out of 12)	Veterinary History	5	3
	Taurology	5	3
	Wild Fauna Ecopathology	5	3
	Veterinary Clinical Pathology	5	3
		Total	300

APPENDIX 3.2.
Example of schedule of Rotations during Practicum.

SEMESTER 2: ORDINARY ROTATION

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Date	22-26 JAN	29 JAN-2 FEB	5-9 FEB	12-16 FEB	19-23 FEB	26 FEB- 1 MAR	4-8 MAR	11-15 MAR	18-22 MAR	8-12 APR	15-19 APR	22-26 APR	29 APR- 3 MAY	6-10 MAY	13-17 MAY	20-24 MAY	27-31 MAY
GROUP 1	VTH							APT	HCV	FPP	AHS	VTF		EPT			
GROUP 2	EPT		VTF		FPP	APT		AHS									
GROUP 3	FPP	AHS	EPT		VTH							APT		VTF			
GROUP 4	VTF		APT		AHS	EPT		VTH								FPP	
GROUP 5	AHS	VTH							FPP	VTF		EPT		APT			
GROUP 6			VTH					APT		FPP	AHS	VTF		EPT		VTH	

APPENDIX 3.3.

3.3.1. Association between SC of the Veterinary Degree (FVETUM) & D1C (EAEVE).

SC (FVETUM)	D1C
• CE1: Generic knowledge of animals, their behaviour and identificative features.	16
• CE2: Structure and function of healthy animals.	
• CE3: Breeding, improvement, management and welfare of animals.	16, 20
• CE4: Physical, chemical and molecular aspects of the main processes that take place in the animal organism.	
• CE5: Basic and applied principles of the immune response.	
• CE6: Basic aspects of the different biological agents of veterinary interest.	
• CE7: Knowledge of alterations in the structure and function of the animal organism.	
• CE8: Knowledge and diagnosis of the different animal diseases, both individual and collective, and potential preventive measures, with special emphasis on zoonosis and notifiable diseases.	22, 24, 34
• CE9: General aspects of medical-surgical treatments.	18, 29
• CE10: Knowledge of the technological processes applicable to domestic animals, including those with direct influence on animal and human health.	
• CE11: Knowledge of the optimal management of animal production systems and their impact on the environment.	20
• CE12: Principles of food science and technology. Quality control of processed foods and food safety.	35
• CE13: Knowledge of the organizational, economic and management aspects in all fields of the veterinary profession.	2
• CE14: Knowledge of the Norms and Laws applicable to each veterinary field and the regulations applicable to animals and their trade.	25, 26, 27
• CE15: Knowledge of the rights and duties of the Veterinarian, with special emphasis on ethical principles.	1, 32
• CE16: Carrying out the history and clinical examination of the animals.	15, 17
• CE17: Collect and send all types of samples with their corresponding report.	21, 33
• CE18: Perform basic analytical techniques and interpret their clinical, biological or chemical results.	21
• CE19: Diagnose the most common diseases using various general and instrumental techniques, including necropsy.	23
• CE20: Identify, control and eradicate animal diseases, with attention to notifiable diseases and zoonosis.	24
• CE21: Emergency care and first aid in Veterinary.	19
• CE22: Perform the most usual medical-surgical treatments in animals, and know the basics for the provision of adequate anaesthesia and analgesia techniques.	18, 26, 27, 28, 29, 30, 31
• CE23: Apply basic procedures to guarantee correct reproductive activity, technological processes in animal reproduction and the resolution of obstetric problems.	
• CE24: Advise and carry out epidemiological studies and therapeutic and preventive programs according to the standards of animal welfare, animal health and public health.	24
• CE25: Evaluate and understand the productive and sanitary parameters of an animal collective, considering the economic and welfare aspects.	20, 36
• CE26: Manage specific protocols and technologies to modify and optimize different animal livestock systems.	20, 36
• CE27: Perform regulated ante-mortem and post-mortem inspection of animals and food intended for human consumption.	33, 34

- CE28: Carry out the sanitary control of different types of companies and establishments of restoration and feeding. Implementation and supervision of quality management systems. 35
 - CE29: Conduct risk analysis, including environmental and of biosecurity, as well as their assessment and management. 3, 28
 - CE30: Apply food technology processes to produce food for human consumption. 35
 - CE31: Advice and management, technical and economic, of veterinary companies in a context of sustainability. 3
 - CE32: Analyse, synthesize, solve problems and make decisions in the all fields of the veterinary profession. 3, 7, 14, 17
 - CE33: Work in a team, uni or multidisciplinary, and show respect, appreciation and sensitivity to others' work. 6
 - CE34: Maintain an ethical behaviour with regards to the profession and society. 1, 7
 - CE35: Communicate at a professional level with colleagues, authorities and society in general in a fluent, oral and written form. 4, 5, 22
 - CE36: Write and present professional reports, always maintaining the necessary confidentiality. 5
 - CE37: Search for and manage information related to the veterinary practice. 8
 - CE38: Know and apply the scientific method in professional practice including evidence-based medicine. 8, 9
 - CE39: Knowledge of how to get professional advice and help. 12, 13
 - CE40: Be aware of the need of updated knowledge, skills and attitudes through a continuous professional training. 10, 11, 13
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3.3.2. Association between SC of the Veterinary Degree (FVETUM) and the underpinned knowledge and understanding requirements (UK&UR).

SC (FVETUM)	UK&UR
• CE1: Generic knowledge of animals, their behaviour and identificative features.	3
• CE2: Structure and function of healthy animals.	2, 3
• CE3: Breeding, improvement, management and welfare of animals.	3
• CE4: Physical, chemical and molecular aspects of the main processes that take place in the animal organism.	3
• CE5: Basic and applied principles of the immune response.	3
• CE6: Basic aspects of the different biological agents of veterinary interest.	5
• CE7: Knowledge of alterations in the structure and function of the animal organism.	2, 5
• CE8: Knowledge and diagnosis of the different animal diseases, both individual and collective, and potential preventive measures, with special emphasis on zoonosis and notifiable diseases.	5, 6, 9, 10
• CE9: General aspects of medical-surgical treatments.	5, 8
• CE10: Knowledge of the technological processes applicable to domestic animals, including those with direct influence on animal and human health.	4
• CE11: Knowledge of the optimal management of animal production systems and their impact on the environment.	4
• CE12: Principles of food science and technology. Quality control of processed foods and food safety.	9, 10
• CE13: Knowledge of the organizational, economic and management aspects in all fields of the veterinary profession.	4
• CE14: Knowledge of the Norms and Laws applicable to each veterinary field and the regulations applicable to animals and their trade.	7
• CE15: Knowledge of the rights and duties of the Veterinarian, with special emphasis on ethical principles.	7
• CE16: Carrying out the history and clinical examination of the animals.	5
• CE17: Collect and send all types of samples with their corresponding report.	5
• CE18: Perform basic analytical techniques and interpret their clinical, biological or chemical results.	5
• CE19: Diagnose the most common diseases using various general and instrumental techniques, including necropsy.	5
• CE20: Identify, control and eradicate animal diseases, with attention to notifiable diseases and zoonosis.	6, 9, 10
• CE21: Emergency care and first aid in Veterinary.	5
• CE22: Perform the most usual medical-surgical treatments in animals, and know the basics for the provision of adequate anaesthesia and analgesia techniques.	5
• CE23: Apply basic procedures to guarantee correct reproductive activity, technological processes in animal reproduction and the resolution of obstetric problems.	5
• CE24: Advise and carry out epidemiological studies and therapeutic and preventive programs according to the standards of animal welfare, animal health and public health.	9, 10
• CE25: Evaluate and understand the productive and sanitary parameters of an animal collective, considering the economic and welfare aspects.	4
• CE26: Manage specific protocols and technologies to modify and optimize different animal livestock systems.	4
• CE27: Perform regulated ante-mortem and post-mortem inspection of animals and food intended for human consumption.	9, 10
• CE28: Carry out the sanitary control of different types of companies and establishments of restoration and feeding. Implementation and supervision of quality management systems.	9, 10

- CE29: Conduct risk analysis, including environmental and of biosecurity, as well as their assessment and management. 9,10
 - CE30: Apply food technology processes to produce food for human consumption. 9, 10
 - CE31: Advice and management, technical and economic, of veterinary companies in a context of sustainability. 4
 - CE32: Analyse, synthesize, solve problems and make decisions in the all fields of the veterinary profession. 1
 - CE33: Work in a team, uni or multidisciplinary, and show respect, appreciation and sensitivity to others' work. 1
 - CE34: Maintain an ethical behaviour with regards to the profession and society. 8
 - CE35: Communicate at a professional level with colleagues, authorities and society in general in a fluent, oral and written form. 1
 - CE36: Write and present professional reports, always maintaining the necessary confidentiality. 1
 - CE37: Search for and manage information related to the veterinary practice. 1, 2
 - CE38: Know and apply the scientific method in professional practice including evidence-based medicine. 1, 2
 - CE39: Knowledge of how to get professional advice and help. 1, 3
 - CE40: Be aware of the need of updated knowledge, skills and attitudes through a continuous professional training. 1, 2
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3.3.3. Association between the subjects of FVETUM and SC, D1C and UK&UR.

CORE SUBJECT	SUBJECT	SC	D1C	UK&UR
Statistics & Business	Statistics & Business	1,13,31,32,33,36,37,38,39	2,3,5,6,7,8,9,12,13,14,16,17	1,2,3,4
Physics & Chemistry	Physics & Chemistry	4,18,33,38	6,8,9,21	1,2,3,5
Biology	General & Molecular Biology	1,2,4,18,32,33,34,35,38,40	1,3,4,5,6,7,8,9, 10,11,13, 14,16,17,21,22	1,2,3,5,8
Biochemistry	Biochemistry	4,7,18,33	6,21	1,2,3,5
Animal Anatomy	Anatomy I	2,33	6	1,2,3
	Anatomy II	2,33	6	1,2,3
	Microscopic Anatomy & Histology	2,33	6	1,2,3
	Anatomy & Histology Central Nervous System (CNS) & Embryology	2,33	6	1,2,3
Physiology	Veterinary Physiology I	1,2,4,18,32	3,7,14,16, 17,21	1,2,3,5
	Veterinary Physiology II	1,2,4,18,32,33	3,6,7,14,16,17,21	1,2,3,5
Genetics	Genetics	1,2,17,18,33,35,36,37	4,5,6,8,16, 21,22,33	1,2,3,5
Identification, Animal Welfare, Ethics & Professional Legislation	Deontology, Legal Medicine & Veterinary Legislation	1,3,8,12,13,14,15,17,18,19, 20,27,28,29,32,34,35,36,37 ,38,39,40	1,2,3,4,5,7,8,9,10,11,12, 13,14,16,17,20,21,22,23,24 ,25,26,27,28,32,33,34,35	1,2,3,4,5,6,7,8,9,10
	Ethnology & Animal Handling	1,3,14,15,16,32, 34,35,37,40	3,4,5,7,8,10,11,13,14,15,16 ,17,20,22,25,26,27,32	1,2,3,5,7,8
	Ethology, Animal Welfare & Animal Protection	1,3,13,14,15,16, 24,25,32,34,35,36,37,40	1,2,3,4,5,7,8, 10,11,13,14,15,16,17,20,24 ,25,26,27,32	1,2,3,4,5,7,8,9,10
Biological Agents of Disease and Structural & Functional Disorders	Microbiology I	6,18,33,36	5,6,21	1,5
	Microbiology II & Immunology	5,6,18,33	21,6	5,1
	Parasitology	6,18,32,33,36,38	3,5,6,7,8,9, 14,17,21	1,2,5
	Nosology & Physiopathology	2,4,6,38	8,9	1,2,3,5
Basics of Diagnosis & Therapeutics	General Pathological Anatomy	4,5,7,32,36,38	3,5,7,8,9,14,17	1,2,3,5
	Propaedeutics	7,8,17,18,19,32, 33,36,37,39,40	3,5,6,7,8,10,11,12,13,14,17 ,21,22,23,24,33,34	1,2,3,5,6,9,10
	Pharmacy & Pharmacology	4,32,33,36,37,39,40	3,5,6,7,8,10,11,12,13,14,17	1,2,3
	Special Pathological Anatomy	7,8,17,19,27,32, 36,40	3,5,7,10,11, 13,14,17,21,22,23,24,33,34	1,2,5,6,9,10
	Imaging Diagnosis	33,39,40	6,10,11,12,13	1,2,3
Clinical Sciences	Pharmacotherapy	4,7,8,18,32,33,36,37,39,40	3,5,6,7,8,10,11,12,13,14,17 ,21,22,24,34	1,2,3,5,6,9,10
	Veterinary Anesthesiology	7,9,15,16,18,21, 22,32,33,34,35,36,37,38,39 ,40	1,3,4,5,6,7,8,9, 10,11,12, 13,14,15,17, 18,19,21,26,27,28,29,30,31 ,32	1,2,3,5,7,8
	General Surgical Pathology & Surgery	7,8,9,15,16,17,18,19,22,23, 32,33,34,35,36,37,38,39, 40	1,3,4,5,6,7,8,9, 10,11,12, 13,14,15,17,18,21,22,23, 24,26,27,28,29,30,31,32,33 ,34	1,2,3,5,6,7,8,9,10
	Medical Pathology	7,8,9,15,16,17,18,19,21,22, 32,33,34,35,36,37,38,39, 40	1,3,4,5,6,7,8,9, 10,11,12, 13,14,15,17,18,21,22,23, 24,26,27,28,29,30,31,32,33 ,34	1,2,3,5,6,7,8,9,10
	Reproduction & Obstetrics	7,9,10,16,17,18, 19,21,23,32,33,34,35,36,37 ,38,39, 40	4,5,6,7,8,9, 10,11,12, 13,14,15,17,21,23,32,33	1,2,3,4,5,8
	Farm Animal Clinics	7,8,9,16,17,19,22,23,32,35, 40	3,4,5,7,10,11,13,14,15,17,1 8,21,22,23,24,26,27,28,29, 30,31,33,34	1,2,5,6,8,9,10
	Special Surgical Pathology & Surgery	7,8,9,15,16,17,18,19,22,32, 33,34,35,36,37,38,39, 40	1,3,4,5,6,7,8,9, 10,11,12, 13,14,15,17,18,21,22,23, 24,26,27,28,29,30,31,32,33, 34	1,2,3,5,6,7,8,9,10
Animal Health	Epidemiology, Zoonosis & Public Health	8,19,20,24,25,32,33,37,38, 39,40	3,6,7,8,9,10,11,12,13,14,17 ,20,23,22,24,34	1,3,4,5,6,9,10
	Infectious Diseases I	7,8,16,18,19,25, 27,32,33,39,40	3,6,7,10,11, 12,13,14,15,17,20,21,22,23 ,24,26,33, 34	1,2,3,4,5,6,9,10
	Infectious Diseases II	7,8,16,17,18,19, 22,25,27,32,33,39,40	3,6,7,10,11, 12,13,14,15,17,18,20,21,22	1,2,3,4,5,6,9,10

			,23,24,26,27,28,29,30,31,33,34	
	Parasitic Diseases	8,16,17,19,20,22,27,33,35,40	4,5,6,10,11, 13,15,17,18,21,22,23,24,26,27,28,29,30,31,33,34	1,2,5,6,9,10
	Toxicology	7,8,13,14,15,16, 18,19,20,22,24,25,27,29,32,33,34,35,36,37,38,39,40	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,17,18,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,36	1,2,3,4,5,6,7,9,10
	Preventive Medicine & Health Policy	8,14,20,25,29,32,33,39,40	3,6,7,10,11, 12,13,14,17,20,22,24,25,26,27,28,34,36	1,2,3,4,5,6,7,9,10
Animal Husbandry	Agronomy	3,10,11,12,13,14,15,17,18,23,25,26,29,31,32,33,34,35,36,37,38,39,40	1,2,3,4,5,6,7,8,9,10,11,12,13,14,16,17,20,21,25,26,27,32,33,35,36	1,2,3,4,5,7,8,9,10
	Animal Nutrition	3,10,11,12,14,17,18,25,26,29,31,32,33,34,35,36,37,38,39,40	3,4,5,6,7,8,9,10,11,12,13,14,16,17,20,21,25,26,27,33,35,36	1,2,3,4,5,7,8,9,10
	Animal Husbandry, Farm Facilities & Welfare	3,18,14,25,26,29,31,32,33,34,36,37,38,39,40	1,3,5,6,7,10,11,12,13,14,16,17,20,25,26,27,28,36	1,2,3,4,7,8,9,10
	Agrarian Economy	13,25,31,32,33,34,35,36,37,39,40	1,2,3,4,5,6,7,8,9,10,11,12,13,14,17,20,22,36	1,2,3,4,8
	Animal Breeding & Welfare	3,18	16,20	3,4
Hygiene, Security & Food Technology	Food Technology	6,7,8,9,10,12,13, 14,15,17,18,24,27,28,29,30,32,33, 34,35,36,37,38,39,40	1,2,3,4,5,6,7,8,9,10,11,12,13,14,17,18,21,22,24,25,26,27,28,29,32,33,34,35	1,2,3,4,5,6,7,8,9,10
	Food Hygiene, Inspection & Control I	1,6,7,8,9,12,24,27,28,29,32,33,34,35,36,37,38,39,40	1,3,4,5,6,7,8,9,10,11,12,13,14,17,18,22,24,29,33,34,35	1,2,3,5,6,8,9,10
	Food Hygiene, Inspection & Control II	6,7,8,10,12,14,15,17,18,27,28,29,30,32,33,34,35,36,37,38,39,40	1,4,5,6,7,8,9,10,11,12,13,14,17,21,22,24,25,26,27,32,33,34,35	1,2,3,4,5,6,7,9,10
	Food Security	1,8,10,12,13,14, 18,28,29,30,32,33,34,35,37,40	1,2,3,4,5,6,7,8,10,11,13,14,17,21,22,24,25,26,27,28,34,35	1,2,3,4,5,6,7,8,9,10
Practicum & Final Degree Project	Practicum	1,2,3,4,5,6,7,8,9, 10,11,12,13,14,15,16,17,18,19,20, 21,22,23,24,25,26,27,28,29,30,31, 32,33,34,35,36,37,38,39,40	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36	1,2,3,4,5,6,7,8,9,10
	Final Degree Project	1,2,3,4,5,6,7,8,9, 10,11,12,13,14,15,16,17,18,19,20, 21,22,23,24,25,26,27,28,29,30,31, 32,33,34,35,36,37,38,39,40	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36	1,2,3,4,5,6,7,8,9,10
ELECTIVES (6 ECTS out of 12)	Veterinary History	33,34,35,37,39,40	1,4,5,6,7,8,10,11,12,13,22	1,2,3,8
	Taurology	1,2,3,6,7,8,9,11, 13,15,17,24,25,27,28,29,30,31,32,33,34,36,38,39,40	1,2,3,5,6,7,8,9,10,11,12,13,14,16,17,18,20,21,22,24,28,29,32,33,34,35,36	1,2,3,4,5,6,7,8,9,10
	Wild Fauna Ecopathology	1,2,6,8,9,16,17,19,20,24,31,32,33,36,38,40	3,5,6,7,8,9, 10,11,13,14,15,16,17,18,21,22,23,24,29,33,34	1,2,3,4,5,6,8,9,10
	Veterinary Clinical Pathology	1,2,6,8,9,16,17,18,19,20,24,31,32, 33,34,35,36,37,38,39,40	3,5,6,7,8,9, 10,11,13,14,15,16,17,18,21,22,23,24,29,33,34	1,2,3,4,5,6,8,9,10

APPENDIX 3.4.

Learning Outcomes of the Core Veterinary FVETUM Programme (including Practicum, Final Degree Project and Electives).

1st YEAR

STATISTICS & BUSINESS (Ref. n° 2786)

- To apply the scientific method to professional practice, including evidence-based medicine.
- To synthesize, solve problems and make decisions.
- To develop a capacity for critical evaluation of a statistician.
- To apply the concepts of statistics in the analysis of productive and health parameters
- To use statistical methods relevant to different types of studies.
- To tabulate and graphically represent data.
- To calculate and interpret the position, dispersion and shape measures applicable to a data series.
- To recognize the most common one-dimensional statistical distributions in the veterinary field.
- To recognize and describe the fundamentals of causality and causal inference, and their relationship to statistics.
- To select, apply and interpret the parametric and non-parametric statistical methods most commonly used in veterinary medicine.
- To correctly assess the effectiveness of a diagnostic test in terms of its application to a population.
- To demonstrate knowledge of the organization and management related to a veterinary company.
- To understand the economic context in which the veterinarian operates.
- To demonstrate effective interpersonal interaction, including communication, leadership, management and teamwork.

PHYSICS & CHEMISTRY (Ref. n° 2787)

- Describe in thermodynamic terms a physical-chemical process.
- Evaluate the rate of a chemical reaction, the effect of concentrations and temperature.
- Know the main types of radioactive and electromagnetic emission, as well as the effect on biological materials and their applications.
- Explain the processes of diffusion through membranes, and the function of a dialytic membrane.
- Understand the function of acids and bases, and determine the pH of their solutions.
- Evaluate oxidation-reduction reactions, and describe processes of electrolysis and electrochemical cells.
- Know the main functional groups present in organic compounds and their reactivity.
- Describe the stereochemistry of organic molecules.
- Know the most important heterocycles relevant in the field of cellular biology.
- Identify the fundamental magnitudes of physics such as length, mass, temperature and time that appear in problems related to the life sciences.
- Know the bases of biomechanics and their application to the structure and movement of living beings.
- Know the basic principles of fluid mechanics and its application to the circulatory system in mammals.
- Know the basic concepts of waves and wave phenomena and their application to the mechanisms of hearing of living beings.
- Apply the concepts of electromagnetism to the study of the nervous system.
- Apply the basic concepts of optics for the design of optical instruments and the process of vision.

BIOLOGY & MOLECULAR BIOLOGY (Ref. n° 2788)

- Define the principles and methods of animal classification.
- Describe and identify the different levels of animal organization.
- Apply dissection methods for the observation and analysis of the internal anatomy of specimens representative of the major animal groups of veterinary interest.
- Interpret the development, growth and biological cycles of the major animal taxa of veterinary interest.
- Observe, manage and preserve animal specimens.
- Recognize the morphology of the main animal taxa of veterinary interest.
- Knowledge of essential concepts related to nucleic acids and their relationship to proteins.
- Study of structural data using molecular models and learning of experimental techniques for the study of nucleic

acids.

- Ability to answer questions related to the subject after a bibliographic search.

BIOCHEMISTRY (Ref. n° 2789)

- Establish the concept of biochemistry, its aims, achievements and methods, highlighting the molecular approximation of vital phenomena in the cellular context.
- Distinguish the structures of the main biological molecules and know their functional groups.
- Expose the fundamentals of enzyme, especially aspects of catalytic efficiency, specificity and regulatory effects.
- Analyse the principles of bioenergetics, which help explain the cell's energy intake from nutrients, as well as their storage and use.
- Explain the cellular compartmentalization carried out by the membranes and the transport processes that provide the cell with the necessary nutrients and the disposal of waste substances.
- Explain the main metabolic pathways of biomolecules relating them and establishing the energy and regulatory aspects that take place in these transformations, directed to the cellular economy.
- Establish the different molecular bases of different physiological and pathological processes.
- Show the role of signalling molecules in the coordination of cellular functions.
- Provide an integrated view of metabolism in different tissues and know their responses before different physiological situations.

ANATOMY I (Ref. n° 2790)

- To know and apply basic knowledge on the structure and general constitution of the common integument and the locomotive apparatus of domestic animals.
- To locate in the living animal the main visible and palpable references of the locomotor apparatus.
- To interpret at basic level anatomical images by means of different diagnostic imaging (RX, CT and MRI).
- To properly apply the anatomical syllabus and its possible variations in different professional fields.
- To dissect cadavers or anatomical preparations.
- To work both autonomously and in a reduced team during practices.
- To extrapolate the anatomical knowledge to particular professional contexts.

ANATOMY II (Ref. n° 2791)

- Describe and recognize the morphology, topography and structure of organs and systems.
- Identify anatomical structures located in the nasal, buccal, pharyngeal and laryngeal cavities, in prosections of different species.
- Identify the anatomical structures located in the visceral space of the neck and in the thoracic, abdominal and pelvic cavities of domestic species in prosections and cross-sections (fixed and plastinated), as well as in CT and MRI images.
- Anatomical knowledge of the male and female external genitalia in different domestic species.
- Basic and applied knowledge of bird anatomy.
- Ability to extrapolate the knowledge and skills acquired in the subject to a professional context.

MICROSCOPIC ANATOMY & HISTOLOGY (Ref. n° 2792)

- Full knowledge of the concept of cell, tissue and organ.
 - To know the techniques of study and observation in cytology and histology
 - To know the structural and ultrastructural characteristics of the eukaryotic cells and their components, relating them to their functions in the context of cellular biology.
 - To know the different varieties of animal tissues, their morphological and functional characteristics and their distribution in the organism.
 - To know the organization of the tissues to build the organs.
 - To know the histological constitution of the organs and deduce their function and understand potential anatomopathological and functional alterations.
-

VETERINARY PHYSIOLOGY I (Ref. n° 2793)

- Know the general functions and importance of water and electrolytes in the body. Identify the different compartments with fluids and know the relative concentration of ions in them. Know the main functions of blood and its role in homeostasis.
- Understand the basic principles of circulatory function, blood flow, electrocardiography, blood pressure, capillary dynamics and cardiac regulation. Ability to apply the knowledge acquired for the diagnosis of cardiovascular disorders in animals..
- Know the functioning of the respiratory system. Understand the importance of respiratory physiology in the maintenance of homeostasis. Ability to apply the knowledge of the functioning of the respiratory system for the diagnosis of respiratory disorders in animals.
- Know the operation of the excretory system. Understand the importance of renal physiology and its clinical repercussion with other systems and organs. Ability to apply the functional knowledge of the excretory system for the diagnosis of alterations of the excretory system in animals.
- Know the functioning of the digestive system. Understand the basic principles of digestive function. Ability to apply the knowledge of the functioning of the digestive system for the diagnosis of digestive disorders in animals, their application in animal production and food safety.
- Know the syllabus that is used in the discipline and the laws, principles, scientific methods and basic experiences of the subject

GENETICS & MOLECULAR GENETICS (Ref. n° 2794)

- Knowledge and differentiation of genetic material in different groups of living organisms.
- To identify the chromosomes between different species of domestic animals.
- Analyse the patterns of Mendelian and non-Mendelian inheritance and interpret the results obtained.
- To evaluate the possible cases of gene interaction, ligation and recombination.
- Knowledge of the main processes that regulate the transfer of information, as well as its expression, in both prokaryotes and eukaryotes.
- To analyse the different mutations and their consequences, at the level of genomic variability, on populations and pathology
- Describe and analyse the state of equilibrium of a population, its evolution and conservation.
- Knowledge and application of different biotechnological methods; genomics and proteomics. Evaluate their use.
- Elaborate and transmit new knowledge in an oral and written way to other professionals or the public in general.

DEONTOLOGY, LEGAL MEDICINE & VETERINARY LEGISLATION (Ref. n° 2795)

- Knowledge of deontological codes for the exercise of the veterinary profession.
- Acquisition of the bases for veterinary expertise and intervention in legal and forensic tissues.
- Correct management of legislation sources.

AGRONOMY (Ref. n° 2796)

- To identify the main vegetable groups for animal feed.
- To indicate at least five attributes that describe a sustainable and one unsustainable production.
- To point out at least five attributes that describe different types of plant surfaces.
- To identify the main groups of by-products destined for animal feed.
- To identify and implement the conservation systems used for plant production.
- To recognize at least five positive or negative attributes of an agricultural-livestock operation on the environment.

2nd YEAR

ANIMAL NUTRITION (Ref. n° 2807)

- To describe the different analytical techniques for the determination of the chemical constituents in ingredients and feed, and knows its practical application.
- To identify and describe macroscopically and microscopically the raw materials commonly used in the compound feed industry (individually and after mixing): energy concentrates, protein concentrates, fibrous foods and micro-ingredients.

- To know the regulations for the use of raw materials and additives, and understand its application and information at the level of labelling of feed and mixtures for animal use.
- To define the different stages in the manufacture of feed and analyse the characteristics of storage, transport systems and machinery, as well as justify the importance of quality control of the manufacturing process.
- To handle food composition tables and interprets the nutritive value in terms of chemical composition, energy and protein value, and is able to indicate limits of incorporation in compound foods according to the species, physiological and productive state.
- To present and exemplify the nutritional needs of each species according to the type of animal, management conditions and environment, as well as the objectives of each particular farm.
- To formulate and calculate compound feeds or rations by linear programming (modelling mathematically at minimum cost) or by using specific rationing software in feed animals: monogastric and ruminant, and is able to generate and interpret the results reports.
- To know the programs of feeding used in the farms, and recognizes the types, supply and presentation of the feed in both animal of animal and companion animal.
- To evaluate the physical condition and nutritional status of the animal or group, and calculates the main productive parameters (gain, consumption and transformation or efficiency) related to animal feed.

ANATOMY & HISTOLOGY CENTRAL NERVOUS SYSTEM & EMBRYOLOGY (Ref. n° 2797)

- Basic and applied clinical knowledge on macroscopic and microscopic structures of the visual and statoacoustic organs.
- Basic and applied clinical knowledge on macroscopic and microscopic structures of the central nervous system (CNS).
- Recognizing the structures of the eye, ear and CNS in images obtained by MRI and CT.
- Basic and applied clinical knowledge on histology of the reproductive apparatus.
- Basic and applied clinical knowledge on the early stages of embryonic development in the main domestic species.
- Basic and applied clinical knowledge on placentation and embryo sacks in domestic mammals.
- Basic knowledge on the development of the main organs (organogenesis), knowing how to analyse and understand the most frequent malformations observed in veterinary clinics.
- Correct use the anatomical and embryological veterinary syllabus (Anatomical Veterinary Nomenclature).

VETERINARY PHYSIOLOGY II (Ref. n° 2798)

- Ability to relate the concept of homeostasis with the organs and tissues that produce hormones, altogether with their function
- Functional knowledge of the male and female reproductive system, as well as the processes necessary for the reproductive function to be completed (fertilization, gestation, delivery, lactation). To know the endocrine mechanisms that regulate the reproductive function. Understand the importance of reproductive health for production and animal medicine.
- Functional knowledge of the nervous system in the regulation of the functions of relation and of the vegetative functions. To understand the importance of Neurophysiology for the diagnosis of neurological disorders in animals and for understanding the bases of animal behaviour.
- To know the basic terminology that is used in the discipline and the laws, principles, scientific methods and basic experiences of the subject.

ETHNOLOGY & ANIMAL HANDLING (Ref. n° 2799)

- To recognize the domestic species, their domestication process and the formation of their main breeds.
- Knowledge of the external morphology of domestic animals, identification of the different morphotypes and their relation to productive aptitudes.
- Knowledge of the productive and reproductive parameters of the domestic species and their variability between breeds and ability to identify the breed most appropriate for the different productive management systems.
- To use ethnological, productive and animal terminology correctly.
- To know and use in an appropriate way the most important sources of information on the different breeds of domestic animals and their optimal handling.

ETHOLOGY, ANIMAL WELFARE & ANIMAL PROTECTION (Ref. n° 2800)

- Correctly identify the animal's ethogram.
- Analyse an ethogram and identify behavioural anomalies.

- Evaluate the welfare of domestic animals in the different production systems.
- Apply animal protection legislation to ensure the welfare of domestic animals at farm, transport and slaughterhouse, as well as of pets and animals used in research.

MICROBIOLOGY I (Ref. n° 2801)

- Characterize the main causative agents of microbial diseases of interest in veterinary medicine, and the way to diagnose and control them.
- Describe and appreciate the role of microorganisms in industrial processes, biotechnology and ecology.
- Explain the fundamentals of taxonomy and the basis of systematic bacteriology.
- Interpret the microbial diversity, physiology, metabolism and genetic bases that regulate the functions of microorganisms.
- Recognize the role of microorganisms as causal agents of diseases in animals and diseases communicable to humans.
- Recognize the microorganism-host relationship, virulence and microbial pathogenicity mechanisms.

MICROBIOLOGY II & IMMUNOLOGY (Ref. n° 2802)

- Apply basic microbiological techniques in virology and mycology and interpret their results.
- Write a report of the results of a microbiological examination.
- To characterize causative agents of viral and mycological diseases of interest in veterinary medicine to diagnose and control them.
- Explain the fundamentals of taxonomy and the basis of virus and fungal systematics.
- Interpret the diversity of the physiology, metabolism and genetic bases that regulate the functions of viruses and fungi.
- Recognize the role of viruses and fungi as causal agents of diseases in animals and diseases communicable to humans.
- Recognize the microorganism-host relationship, virulence and mechanisms of pathogenicity of viruses and fungi.
- Explain the nature, structure and genetics of viruses.
- Recognize the basis of immunodiagnostic techniques.
- Perform the basic techniques of immunological diagnosis.
- Perform a serological test report.
- Describe the main types of vaccines.

PARASITOLOGY (Ref. n° 2803)

- To understand the importance of parasites in the field of animal health, public health and animal production.
- To use a scientific vocabulary that allows a correct use of language in Parasitology, as well as to correctly apply the nomenclature and the systematics of the parasites.
- Identify by its morphology the different parasites of veterinary interest.
- To know the biology and ecology of the main parasites of veterinary interest.
- To understand the principles supporting the relationship between parasites and hosts.
- To perform basic diagnostic techniques in parasitology and analyse their results.

NOSOLOGY & PHYSIOPATHOLOGY (Ref. n° 2804)

- Describe the main components of the nosology.
- Explain the concepts of health and illness.
- To know and explain the fundamentals on which the different clinical judgments are based.
- To know the relationship between the Veterinarian and the owner of the animal regarding the establishment of links, maintenance of links and rupture of links.
- To know the pathophysiological mechanisms of the different organic systems as well as their clinical consequences.

GENERAL PATHOLOGICAL ANATOMY (Ref. n° 2805)

- Acquire a vocabulary that allows to define properly the pathological processes.
- Understand the mechanisms that induce morpho-pathological changes, and how they induce functional alterations.
- Recognize and identify basic lesions, relating them to their etiology.

EPIDEMIOLOGY, ZONOSIS & PUBLIC HEALTH (Ref. n° 2806)

- Apply knowledge related to collective diseases, zoonosis and health by means of problem solving and argumentation.
 - Collect and interpret relevant information concerning collective diseases, zoonosis and health.
 - Communicate information relating to collective diseases, zoonosis and health.
 - Ability to search information in bibliographic sources and databases, selecting the most relevant in each case.
-

3rd YEAR

PROPAEDEUTICS (Ref. n° 2808)

- Obtain a precise clinical history of both an individual animal and a group of animals, with regards to their environment.
 - Handle and restrain animals safely and respectfully, and be able to instruct others to help the veterinarian perform these procedures.
 - Perform a complete clinical examination and demonstrate the ability to make clinical decisions based on the data obtained.
 - Collect, preserve and transport samples of all types, select the most appropriate diagnostic tests, interpret them and understand the limitations of the results of those tests.
 - Perform complete analyses of blood, urine and cytology samples, interpret the results and make clinical decisions based on them.
 - Perform and correctly interpret an electrocardiogram.
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PHARMACY & PHARMACOLOGY (Ref. n° 2809)

- To understand and apply the main concepts, principles and laws on which the subject is based, as well as the knowledge of the specific terminology used in it.
 - To know and understand the different groups of drugs and their mechanisms of action from the experimental, therapeutic and toxic perspectives. Explain and analyse the mechanism of molecular and cellular action of drugs and their effect (pharmacodynamics).
 - To know, understand and value the processes that govern the evolution of drugs in their transit through the animal organism, taking into account inter-specific and interracial variations and evaluate the importance of these processes in the clinical application of drugs (Pharmacokinetics).
 - To understand and interpret legislation that affects prescribing and dispensing of medicines, and guidelines for the responsible use of medicines, including the responsible use of antimicrobials and antiparasitics.
 - To collaborate with the National Veterinary Pharmacovigilance Program and understand its importance, as well as disseminate and discuss incidents with other colleagues and other health professionals.
 - To maintain and manage a personal kit suitable for clinical use.
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SPECIAL PATHOLOGICAL ANATOMY (Ref. n° 2810)

- To make necropsies of mammals and birds correctly.
 - To describe the lesions of the organs correctly.
 - To write necropsy reports.
 - To diagnose lesions from the organs.
 - To relate the lesions of the organs with the etiology.
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IMAGING DIAGNOSIS (Ref. n° 2811)

- Identify the different imaging diagnostic techniques.
- Analyse and interpret an x-ray and ultrasound.
- Correctly use the terminology in each diagnostic imaging medium (radiology, ultrasound, computed tomography and magnetic resonance imaging).
- Apply different radiographic and ultrasound models of each lesion in each functional system or apparatus.
- Produce a list of differential diagnoses according to the radiographic and ultrasound signs observed.
- Evaluate other the potential use of other imaging techniques to reach the definitive diagnosis.

- Position the animal correctly for x-rays of the different anatomical regions (head, spine, thorax, abdomen, pelvis and extremities).
- Calculate the radiographic exposure parameters for the radiographs of the different anatomical regions.
- Correct use of the radioprotection elements of the X-ray room to perform x-rays, thus protecting against ionizing radiation.
- Recognize the usual artifacts that appear on the ultrasound images.

VETERINARY ANESTHESIOLOGY (Ref. n° 2812)

- To know and describe the effect and clinical use of sedatives, analgesics, general anesthetics, local anesthetics or other drugs commonly used in veterinary anesthesiology.
- To know the importance of the pre-anesthetic evaluation of the patient and to know how to perform it in its fundamental aspects including the ASA categorization.
- To know and describe the diverse techniques for the control of the pain and to know how to design rational protocols of multimodal analgesia including fundamental locoregional techniques.
- To identify the anesthetic peculiarities of the different animal species.
- To know the signs of anesthesia and adequate analgesia and analyse the information of the anesthetic monitoring, making the appropriate decisions.
- Recognize and safely handle anesthetic equipment.
- To know and describe protocols of anesthetic and analgesic management according to the needs of the patient in its more general aspects.
- Acquire manual skills that allow the dosage and safe administration of the fundamental products in anesthesia, maintain permeable airway, have vascular access, monitor the patient and ensure a safe recovery.
- Recognize the most frequent accidents and anesthetic complications, describing the basic lines of action and treatment

INFECTIOUS DISEASES I (Ref. n° 2813)

- Apply knowledge related to infectious diseases of veterinary interest through problem solving and argumentation.
- To collect and interpret relevant information on infectious diseases of veterinary interest.
- To transmit information on infectious diseases of veterinary interest.
- To search information in bibliographic sources and databases, selecting the one that is relevant.
- Correctly displays the results of the clinical practices and the assigned seminar. It is adequately expressed with owners and technicians during external clinical practices.
- Make a presentation about the clinical practices and seminars supported by the use of ICTs.
- Develop a seminar work in a coordinated and effective manner.
- To use of language correctly with other veterinary technicians or owners during outpatient clinic visits to farms.
- To design and select the correct strategy for diagnosis, treatment, prevention and control of clinical cases in the laboratory.
- To carry out the diagnosis of clinical cases in the laboratory.
- To recognize the animal diseases, as much for the symptoms of animals as for the repercussions in the collective. Recognize what diseases can be transmitted to humans and what is the protocol to be reported to the authorities.
- To select samples suitable for laboratory diagnosis in external clinical practices.
- To critically analyse a clinical history and differentiate information of interest for the resolution of cases.
- To perform and interpret correctly the basic microbiological techniques for the diagnosis of infectious diseases in the laboratory.
- To perform necropsy and collect and process samples suitable for laboratory diagnosis.
- To analyse and evaluate the different health parameters in a community (microbiological, serological data, etc.)
- To decide the correct methodology to apply for the diagnosis of the clinical cases that are addressed in the laboratory or in the practices of external clinic.
- To select the best strategies of fight in each case for the control of different infectious diseases.
- To distinguish the major infectious diseases of veterinary interest and apply measures for diagnosis, prevention and control.
- To identify the main mechanisms of transmission and maintenance of the main infectious diseases of veterinary interest.

INFECTIOUS DISEASES II (Ref. nº 2814)

- Apply knowledge related to infectious diseases of veterinary interest through problem solving and argumentation.
- To collect and interpret relevant information on infectious diseases of veterinary interest.
- To transmit information on infectious diseases of veterinary interest.
- To search information in bibliographic sources and databases, selecting the one that is relevant.
- Correctly displays the results of the clinical practices and the assigned seminar. It is adequately expressed with owners and technicians during external clinical practices.
- Make a presentation about the clinical practices and seminars supported by the use of ICTs.
- Develop a seminar work in a coordinated and effective manner.
- To use of language correctly with other veterinary technicians or owners during outpatient clinic visits to farms.
- To design and select the correct strategy for diagnosis, treatment, prevention and control of clinical cases in the laboratory.
- To carry out the diagnosis of clinical cases in the laboratory.
- To recognize the animal diseases, as much for the symptoms of animals as for the repercussions in the collective. Recognize what diseases can be transmitted to humans and what is the protocol to be reported to the authorities.
- To select samples suitable for laboratory diagnosis in external clinical practices.
- To critically analyse a clinical history and differentiate information of interest for the resolution of cases.
- To perform and interpret correctly the basic microbiological techniques for the diagnosis of infectious diseases in the laboratory.
- To perform necropsy and collect and process samples suitable for laboratory diagnosis.
- To analyse and evaluate the different health parameters in a community (microbiological, serological data, etc).
- To decide the correct methodology to apply for the diagnosis of the clinical cases that are addressed in the laboratory or in the practices of external clinic.
- To select the best strategies of fight in each case for the control of different infectious diseases.
- To distinguish the major infectious diseases of veterinary interest and apply measures for diagnosis, prevention and control.
- To identify the main mechanisms of transmission and maintenance of the main infectious diseases of veterinary interest.

PARASITIC DISEASES (Ref. nº 2815)

- To communicate in a correct oral and written form in the Spanish language.
- To understand and use documents and books on parasitic diseases written in English language.
- To analyse and synthesize information relevant to parasitic diseases and apply knowledge in practice.
- To recognize the different animal parasitic diseases through the symptoms and injuries present in the animals, as well as their consequences in the animal collectives. Also how to prevent them, with special emphasis on zoonosis and notifiable diseases.
- To know the procedure to collect samples in cases of suspicion of parasitic diseases and how to send them with their corresponding report to the laboratory.
- To perform diagnostic techniques and understand the results for the identification of the most common parasitic diseases, using different general and instrumental techniques.
- To know the measures of control and eradication of the parasitic diseases, with special attention to the notifiable diseases and zoonosis.

TOXICOLOGY (Ref. nº 2816)

- Identify the main mechanisms of acute and chronic toxic action in living beings, with special focusing in the interspecific differences, including human beings.
- Know the main chemical, biological or physical agents (natural or synthetic) able to induce an acute or chronic toxic process in living beings (human included) or in the environment.
- Knowledge of the residues (drugs, additives, contaminants, zootechnical products, etc.) in food, with potential risk on human and animal health.
- Knowledge the environmental contaminants with potential risk on human and animal health.
- Apply toxicological and regulatory bases to guarantee the safety of the drugs, and additives.
- Know and decide on the toxicity and ecotoxicity tests to be used in food risk assessment and environmental risk assessment.

- Interpret correctly the basic chemical-toxicological techniques, and the results obtained on food and environmental samples for their use in risk assessment.
- Apply knowledge related to clinical poisoning through problem solving and argumentation
- Recognize toxic processes in animals, both by the symptoms and the observation of the environment.
- Perform and interpret correctly the basic chemical-toxicological techniques, and their results, for the diagnosis of acute or chronic poisoning depending on the clinical or forensic perspective in every case.
- Collect and interpret relevant information on toxic processes and their consequences from the clinical, forensic, food, and environmental perspectives.
- To transmit information about toxic processes from the clinical, forensic, food, and environmental perspectives.
- To search for information in bibliographic sources and databases, selecting the one that is relevant depending on the clinical, forensic, food, and environmental perspectives.
- It shows correctly the results of the clinical and laboratory practices and the seminars. It is adequately expressed with owners and technicians during external clinical practices.
- Design and select the correct strategy for the diagnosis, treatment, prevention and control of clinical cases in the laboratory, and in the field.
- Decide the correct methodology to apply for the diagnosis of clinical or forensic cases that are addressed in the laboratory or in the practices of the external clinic.
- Select samples suitable for laboratory diagnosis in food, environmental, clinical, and forensic practices.
- Critically analyse a clinical history and differentiate information of interest for the resolution of cases.
- Knowledge of the decontamination processes to be applied in acute poisoning with special interest in gastric decontamination methods.
- Use language correctly with other technicians or owners during field practices, and with the law administration in forensic cases.
- Elaborate a report on clinical, and laboratory practices and seminars supported by the use of the adequate scientific references.

4th YEAR

PHARMACOTHERAPY (Ref. n° 2821)

- To define the fundamental criteria for establishing pharmacological treatments.
- To design therapeutic and preventive programs according to the standards of animal welfare, animal health and public health.
- To explain and discuss the pharmacology of agents acting on different organs, systems and apparatus.
- To criticize and evaluate the use of drugs according to their active principles and to be aware of the importance of being updated about the emergence of new drugs by searching on relevant sources.
- To design pharmacological supporting, symptomatic and etiologial treatments.
- To apply economic, sanitary and ethical-legal criteria, when establishing a therapeutics in domestic animals.
- To select the most suitable drugs for a correctly diagnosed pathology.
- To rationally choose a pharmacological treatment in a precise patient.
- To identify adverse reactions and interactions of the drugs and analyse the benefit-risk ratio that entails their use.
- To know how evaluate the patient's response and modify the treatment if necessary (therapeutic alternatives).

GENERAL SURGICAL PATHOLOGY AND SURGERY (Ref. n° 2822)

- To know and identify the most frequent surgical diseases mainly in small animals and equids.
- To perform the diagnosis and treatments in surgical pathologies.
- To prepare the patient correctly, dress appropriately in the operating room, choose and order the surgical material for each intervention.
- To properly perform cures and bandages on the traumatized animal.
- To know the surgical suture material.
- To perform basic general surgery techniques: cutaneous sutures, sutures in the digestive tract.

MEDICAL PATHOLOGY (Ref. n° 2823)

- Communicate effectively with clients, the public, veterinary partners and responsible authorities, using language appropriate to the interested audience.
- Understand and apply the principles of clinical knowledge, and practice evidence-based veterinary medicine.

- Obtain the relevant and accurate history of an individual animal or group of animals and their environment.
- Conduct a complete clinical examination and demonstrate clinical decision-making capacity.
- Develop appropriate treatment plans and administer treatments in the interest of patients and in relation to available resources.
- Attend small animals and horses in an emergency and perform first aid.
- Collect, store and transport samples, select appropriate diagnostic tests, interpret and understand the limitations of test results.
- Understand the contribution that imaging techniques and other diagnostic tests can make to make a diagnosis.
- Prescribe and dispense medicines correctly and responsibly in accordance with recent legislation and guidelines.
- Recognize when a euthanasia is appropriate to perform.

REPRODUCTION & OBSTETRICS (Ref. n° 2824)

- To know the physiological and endocrine basis of the reproduction that lead to the production of gametes, fertilization and pre-implantational embryonic development in the domestic species.
- To know the physiological basis of the different existing methods to induce and synchronize the oestrus in the female of the domestic species, applying the most adequate protocol in each situation.
- To know and perform different modalities of artificial insemination, as well as biotechnological manipulations of the semen in the different domestic species.
- To know the reproductive biotechnologies applied to the embryos of the different domestic species.
- To know the mechanisms of the establishment and maintenance of the gestation that trigger the delivery in different species of domestic interest and to recognize the importance of the physiological bases of the puerperium and the lactation.
- To identify when it is necessary to perform labor induction, as well as a therapeutic abortion in different domestic species and to apply the appropriate treatments for each situation.
- To know the importance of proper fetal development and how pelvimetry is necessary to satisfactorily solve a dystocic delivery.
- To diagnose and solve obstetric and postpartum problems.
- To identify and solve problems of the reproductive system and to apply appropriate medical and surgical treatments in different domestic species.
- To identify, treat properly and prevent problems affecting newborns.

ANIMAL HUSBANDRY, FARM FACILITIES & WELFARE (Ref. n° 2825)

- To know the basis of animal husbandry with regards to the traditional and current systems.
- To correctly optimize different animal husbandry systems and their impact on the environment.
- To know and correctly use different reproductive strategies and procedures applied to animal husbandry.
- To know and understand the core topics with regards to livestock facilities and environmental hygiene.
- To know and correctly manage the productive parameters of an animal collective, considering its economic and welfare aspects.
- To correctly manage the specific protocols and technologies designed to modify and optimize the different systems of animal husbandry.

AGRARIAN ECONOMY (Ref. n° 2826)

- To understand the economic and social context of the veterinary profession.
- In a context of sustainability to achieve a basic knowledge of business related to breeding or husbandry of farm animal, as well as those for domestic use, leisure and sports.
- To know and apply principles of effective personal interaction, including communication, leadership, management and teamwork.

FOOD TECHNOLOGY (Ref. n° 2827)

- To control the production and the elaboration of foodstuffs from the primary stage until the consumer.
- Identify the technological processes that take place during the food manufacturing in the Food Industry.
- Identify the main biological, chemical and physical hazards that can affect food safety in the different food companies.
- Identify the Critical Control Points present in the food product elaboration chain in order to know how affect the food security.
- Knowledge of the HACCP as a valuable tool to be applied in the food industry management.

FOOD HYGIENE, INSPECTION & CONTROL I (Ref. n° 2828)

- To know the parameters which define food quality in terms of food safety, nutritional quality and organoleptic quality.
- To identify the main biological, chemical and physical hazards that may affect food safety.
- To use the main methods of microbiological analysis in hygienic quality of food.
- To apply the methods of chemical analysis to determine the chemical composition of food.
- To analyse the quality parameters of honey and eggs, according to the current legislation.
- To identify the main changes that food may suffer during food processing, as well as possible alterations and adulterations, and evaluate their impact on food security.
- To know the sanitary criteria that must be followed in the design of the facilities and food establishments, along with the hygienic manipulation, according to the criteria established in the current legislation.
- To know the official control of food products and food establishments, as well as the design of the official control plans of the food chain and the protocols for the accomplishment of the veterinary inspection according to the current legislation, including the procedures of sampling.
- To know the Good Hygienic Practices and the principles of Hazard Analysis and Critical Control Points and their importance to ensure food hygiene and ensure food safety.
- Acquire general knowledge about the hygienic handling of food.
- Relate food security to public health, and know the importance of ensuring food safety to prevent diseases in the human population.
- To know the elements of Risk Analysis as a procedure when establishing measures in the management of food hazards.
- To identify and know the microorganisms that cause food poisoning, the main symptoms, the food involved and the control measures to be applied along the food chain for its control.
- To differentiate the epidemiological characteristics of the main foodborne diseases, their importance within the Epidemiological Surveillance Programs and the investigation and follow-up procedures.

5th YEAR

FARM ANIMAL CLINICS (Ref. n° 2829)

- To communicate effectively with farmers, veterinary colleagues and authorities with an appropriate professional language.
- To understand and use evidence-based veterinary medicine.
- To obtain the relevant and accurate history of an individual animal or group of animals with regards to their environment.
- To perform a complete clinical examination and demonstrate clinical decision-making capacity.
- To manage the farm animals in an appropriate way for clinical practice.
- To know the most frequent clinical disorders of farm animals.

SPECIAL SURGICAL PATHOLOGY (Ref. n° 2830)

- To perform a correct anamnesis of the patient, use appropriate diagnostic methods and decide the appropriate surgical treatment.
- To identify and diagnose the main alterations of the locomotor apparatus.
- To identify lameness due to neurological problems versus traumatic problems.
- To perform the anterior-drawer-test in the knee for the diagnosis of cranial cruciate ligament rupture.
- To perform in cadaver the techniques of thoracotomy and thoracostomy.
- To perform in cadaver a total splenectomy.

PREVENTIVE MEDICINE & HEALTH POLICY (Ref. n° 2831)

- To apply knowledge, collect information and communicate effectively about the health management programs of each species and the mechanisms of prevention and surveillance of animal diseases.
- To search information in bibliographic sources and databases, selecting the one that is relevant.
- To make a presentation of the contents with regards to the seminars with support and use of the TICs.
- To solve the practical cases of prevention and surveillance clinical cases, as well as design and select the correct strategy according to the current legislation.
- To implement the programs for the control and eradication of animal diseases and the standards of welfare, animal health and public health that regulate animal trade, all according to the current legislation.

- To identify animal diseases, both for the symptoms of animals and for the repercussions on the collective and diseases that can be transmitted to humans.
- To select the Norms and Laws for the prevention, surveillance and movement of animals in different levels of concretion.
- To interpret correctly the legislation for the prevention, surveillance and movement of animals in different levels of concretion.
- To analyse and evaluate correctly the different health parameters in a community.
- To distinguish major infectious diseases of veterinary interest, and to know the sanitary management programs and the mechanisms of action for the diagnosis, prevention and control of the diseases.
- To identify the main mechanisms of transmission and maintenance of major infectious diseases of veterinary interest.

ANIMAL BREEDING & WELFARE (Ref. n° 2832)

- To know the genetics of populations applied to farm animals.
- To know the structure of the populations of farm animals.
- To know the productive parameters that can be improved in each farm species.
- To know the correlation between the different productive parameters and evaluate the economic importance of these parameters in each farm species.
- To have basic knowledge about the economic objectives of selection
- To know basic and applied principles of the construction of indexes of genetic selection.
- To know the basic concepts of heritability and the phenotypic and genotypic correlations.
- To know the different types of cross-breeding.
- To know the basic and applied principles on genetic selection based on molecular markers.
- To know the genetic regulation of pathologies, of the immune system and its alterations.
- To have basic knowledge about xenotransplantation and allotransplantation.
- To have basic knowledge on the genetic regulation of pharmacological interactions with the animal.
- To know and understand the main molecular techniques, classical PCR, real-time PCR, RFLP, as well as its uses for genetic improvement.
- To apply PCR and ELISA techniques for the diagnosis of diseases in livestock groups, as well as produce and interpret seroprofiles and PCR-profiles.
- To know how to acquire, analyse and interpret the different productive parameters in the main farm species.

FOOD HYGIENE, INSPECTION & CONTROL II (Ref. n° 2833)

- To analyse the nutritional composition of the food (meat, fish and milk), its organoleptic characteristics and.
- To recognize the main species of fish and shellfish marketed in Spain.
- To know the categorization and classification of carcasses and meats, as well as the anatomical differences depending on the species, age and sex.
- To know the classification of milk and milk products according to their origin, technological treatment and nutritional composition.
- To know the specific rules of hygiene for products of animal origin, as well as the legislation regarding the official controls of those products.
- To know the bromatological alterations that occur in the food throughout its useful life, especially the organoleptic, physical and chemical changes derived from the growth of altering microorganisms.
- To know the importance of the preservation of food of animal origin through the technological processes, and its control, to avoid microbial growth.
- To evaluate the documentation necessary to deliver the animals to the slaughterhouse, according to the animal species (Guides, ICA, DIB, vehicle disinfection heel, etc.)
- To be familiar with the regulations concerning animal welfare during transportation, unloading and storage in a slaughterhouse.
- To know the influence of animal welfare on the quality of the meat.
- To recognize the clinical signs of ill animals potentially hosting transmittable diseases to humans or animals.
- To know the conditions for establishing the suitability of animals for slaughter.
- To know how to proceed to carry out the post-mortem systematic inspection of each animal species.
- To know the injuries and anomalies of the meat that can put at risk human and animal health.
- To be familiar with the regulations for taking samples for the monitoring of TSEs in slaughterhouses, the national residue research plan and the trichinae analysis.
- To know the destination of animal by-products not intended for human consumption (SANDACH).

- To know what the MERs in Spain are, how they should be extracted, stored and destroyed.
- To produce a mock report on the suitability for consumption of a carcass or animal viscera, according to the ante-mortem and post-mortem inspection.
- To evaluate the hygienic design of slaughterhouses, markets and milking rooms and establish improvement actions to avoid contamination at source.
- To design an HACCP system applied to establishments aimed at producing meat, fish and milk (slaughterhouse, fish markets or milking parlors).
- To know the importance of pollution prevention through good hygiene practices in slaughterhouses, markets or milking parlors.
- To be aware of the biological and chemical hazards associated with meat, fish and milk products, their possible transmission to humans (zoonoses) and other animals, their prevention and control.
- To be familiar with the sampling and microbiological analysis of work surfaces, manipulators, channels, fish or milk, and their critical limits for the verification of correct hygiene practices.

FOOD SECURITY (Ref. n° 2834)

- Identify the main biological, chemical and physical hazards that can affect food safety in different food groups and in the different food industries.
- Identify the main stages of technological processing of food and how they affect food security, identifying those that are considered PCC.
- Knowledge of the specific prerequisites for specific sectors according to current legislation.
- Apply Hazard Analysis and Critical Control Points in different food industries.
- Knowledge of specific aspects of the hygienic manipulation of the different food groups and their importance as a prerequisite to implement HACCP.
- Knowledge of the elements of the Risk Analysis as a procedure to be followed when establishing measures in the management of food hazards.

PRACTICUM (Ref. n° 2835)

- To understand the veterinarian's ethical and legal responsibilities in relation to patients, clients, society and the environment.
- To demonstrate knowledge of the organization, management and legislation related to a veterinary business.
- To promote, monitor and maintain health and safety in the veterinary field.
- To demonstrate knowledge of QA systems and apply principles of risk management to your practice.
- To communicate effectively with clients, the public, professional colleagues and responsible authorities, using language appropriate for the interested public.
- To write accurate clinical and client records, and case reports when necessary, in a way that is satisfactory to colleagues and understandable to the public.
- To work effectively as a member of a multidisciplinary team in service delivery.
- To understand the economic and emotional context in which the veterinarian operates.
- To understand and apply principles of clinical governance and practice evidence-based veterinary medicine.
- To demonstrate a lifelong learning ability and a commitment to learning and professional development. This includes recording and reflecting on professional experience and taking action to improve performance and competence.
- To obtain a precise and relevant history of animals, individually or in groups, and their environment.
- To handle and retain animal patients safely and with respect to the animal, and instruct others to assist the veterinarian in performing these techniques.
- To perform a complete clinical examination and demonstrate ability in clinical decision making.
- To define adequate treatment plans and administer treatment in the interest of patients and with regard to available resources.
- To assist all species in an emergency and perform first aid.
- To evaluate the physical condition, well-being and nutritional status of an animal or group of animals and advise the client on the principles of breeding and feeding.
- To collect, store and transport samples, select appropriate diagnostic tests, interpret and understand the limitations of test results.
- To communicate clearly and collaborate with referral and diagnostic services, including providing an appropriate background.
- To understand the contribution that imaging and other diagnostic techniques can make to achieve a diagnosis.

Use the basic imaging equipment and perform an effective examination as the case may be, in accordance with good health and safety practices and current regulations.

- To recognize suspected signs of notifiable, notifiable and zoonotic diseases and take appropriate measures, including notification to relevant authorities.
- To prescribe and dispense medicines correctly and responsibly in accordance with legislation and the latest guidance.
- To report suspicion of adverse reactions.
- To apply biosecurity principles, including sterilization of equipment and disinfection of clothing.
- To perform aseptic surgery correctly.
- To secure sedation, general and regional anaesthesia, and to apply chemical methods of subjection.
- To evaluate and manage pain.
- To recognize when euthanasia is appropriate and perform it with respect to the animal, using an appropriate method, showing sensitivity to the feelings of the owners and others, taking due account of the safety of the present, and advice on disposal of the cadaver.
- To perform a systematic post-mortem examination, record observations, tissue samples, store and transport them.
- To carry out an ante-mortem inspection of animals destined to the food chain, including attention to aspects of well-being.
- To correctly identify conditions affecting the quality and safety of animal products, to exclude animals whose condition means that their products are not suitable for the food chain.
- To perform inspection of food and feed, including post-mortem inspection of food-producing animals and inspection in the field of food technology.
- To advise and implement appropriate preventive programs for the species and in line with accepted standards of animal health, welfare and public health.

FINAL DEGREE PROJECT (REF. n° 2836)

- To analyse, synthesize, solve problems and make decisions.
- To use the scientific method to professional practice, including evidence-based medicine. Search and manage information related to the professional activity
- To communicate the information obtained during the professional exercise in a fluid, oral and written way, with other colleagues, authorities and society in general.
- To demonstrate knowledge of English to communicate orally and in writing in academic and professional contexts.
- To expose the knowledge and demonstrate the skills acquired in any of the veterinary fields.
- To write and submit professional reports satisfactorily.
- To critically review and evaluate literature and presentations.
- To demonstrate professional skills to contribute to the advancement of veterinary knowledge, in order to improve the quality of animal care and veterinary public health.
- To deal with incomplete information, deal with contingencies, and adapt to change.
- To solve problems in one of the main areas of Veterinary Medicine.
- To recognize personal and professional frontiers, and know how to seek professional advice, assistance and support when necessary.
- To participate in self-audit and peer review processes to improve performance.

ELECTIVES 3th YEAR

VETERINARY HISTORY TAUROLOGY (Ref. n° 2818)

- To know the zootechnics of fighting bull (“*toro de lidia*”).
- To know the different varieties of the fighting bull and their main differences.
- To know the husbandry of the fighting bull.
- To have a basic knowledge about the main pathological problems of the fighting bull.
- To have a basic knowledge about reproduction and nutrition in the fighting bull.
- To know the functions of the veterinarians who act in the area while the bullfighting.

WILD FAUNA ECOPATHOLOGY (Ref. n° 2819)

- To make a report on contents related to Ecopathology.

- Participate in flipped class-room activities in a coordinated and effective way.
 - To express correctly with other veterinarians or owners during outpatient clinic visits.
 - To apply knowledge related to Ecopathology through problem solving and argumentation.
 - To identify some of the major etiological agents that affect the various species of wild animals, including carnivores, ungulates, birds, amphibians and reptiles.
 - To distinguish between different approaches to the management and control of infectious diseases of wildlife, both in the natural and ex situ environments.
 - To evaluate macroscopic lesions and adequately solve sampling for diagnosis of infectious-contagious diseases of the wild animals.
 - To distinguish between different approaches to the management and control of infectious diseases of wildlife, both in the natural and ex-situ environments.
 - To identify the risk factors, and other epidemiological factors, most important in the occurrence of infectious diseases of the wild animals.
 - To apply knowledge related to Ecopathology through problem solving and argumentation.
-

VETERINARY CLINICAL PATHOLOGY (Ref. nº 2820)

- To learn how to set up a basic laboratory for veterinary analysis.
 - To know to interpret correctly a haemogram of the most common veterinary species.
 - To know how to interpret correctly serum biochemical profile of the most common veterinary species.
 - To know basic interpretation of a cytology from masses, organs and body fluids.
-

VETERINARY HISTORY (Ref. nº 2821)

- To know the origin of the first veterinary actions that took place before the birth of the Veterinary as science and as a profession.
 - To know basic aspects about animal domestication and its consequences for the development of the humanity.
 - To know the contributions of classical cultures to the development of livestock and the art of curing and preventing animal diseases.
 - To know what is the “Albeitería” and who were the “Albéitares”, highlighting its historical implications worldwide.
 - To know when, how and why the first Veterinary Schools in the world were built.
 - To know the foundation and development of the Veterinary Schools in Spain.
 - To know the most relevant figures of the Spanish and worldwide veterinarians.
 - Establish chronologically the most relevant historical facts for the development of Veterinary Medicine worldwide.
-

APPENDIX 3.5.

Example of legal binds (agreements) with the companies (COIE).



UNIVERSIDAD DE MURCIA | Servicio de Orientación y Empleo (COIE)

Nº OFERTA:

IMPRESO DE ACEPTACIÓN DE ALUMNOS EN PRÁCTICAS EXTRACURRICULARES

Una vez remitido este impreso, debe informar al alumno que pase por las oficinas del COIE para formalizar la documentación.

1ª Aceptación Prórroga (ampliación del periodo de prácticas)

Alumno:	<input type="text"/>	DNI	<input type="text"/>	TF	<input type="text"/>
Titulación:	<input type="text"/>				
Empresa:	<input type="text"/>			CIF	<input type="text"/>
Persona autorizada por el responsable de la empresa que realiza esta aceptación	<input type="text"/>				
Correo electrónico	<input type="text"/>				
Cargo en la empresa	<input type="text"/>				

DATOS A CONVENIR ENTRE EMPRESA Y ALUMNO

Fecha inicio*	<input type="text"/>	Fecha final*	<input type="text"/>	Horas/día	<input type="text"/>
Días/semana	<input type="text"/>	Total horas*	<input type="text"/>	Total días	<input type="text"/>
Localidad de realización de prácticas:	<input type="text"/>				

Tutor empresa*:	DNI/Pasaporte	<input type="text"/>
	Nombre	<input type="text"/>
	Apellidos	<input type="text"/>
	Correo electrónico:	<input type="text"/>

¿Existe relación de parentesco hasta el 2º grado entre cargos directivos o tutor de empresa y el alumno?	<input type="checkbox"/> SI	<input type="checkbox"/> NO
Cantidad de la beca aportada por la empresa (€/mes):	<input type="text"/>	

PROYECTO FORMATIVO

1.- Objetivos educativos de la práctica:
2.- Tareas a desarrollar en la empresa por el alumno (deberán estar relacionadas con la titulación demandada):

(Firma y Sello "excepto envío electrónico")

Nota: Duración de las prácticas: Mínimo 100 horas y Máximo 750 horas.

APPENDIX 3.6.

3.6.1. Example of academic UM tutor report (COIE).



UNIVERSIDAD DE
MURCIA

Servicio de
Orientación y Empleo (COIE)

Informe final: Tutor/a de la Universidad

El/La tutor/a UMU ha de rellenar el siguiente informe para hacer constar la valoración de las prácticas realizadas por el estudiante.

ESTUDIANTE			
Nombre		NIF	
Titulación			
EMPRESA/INSTITUCIÓN			
RAZÓN SOCIAL		CIF	
DATOS DE LA PRÁCTICA			
1º PERÍODO	Fecha inicio	Fecha fin	Total horas
2º PERÍODO y sucesivos	Fecha inicio	Fecha fin	Total horas
TUTOR/A DE UNIVERSIDAD			
Nombre		NIF	

Valoración de las prácticas. Para ello utilice la siguiente escala de 1 a 5, siendo 1 = el valor más negativo y 5 , el valor más positivo.

Estancia en la empresa o institución	
* Formación práctica adquirida por el estudiante	
* Adecuación del perfil de la titulación a las funciones y tareas encomendadas	
Valoración de la experiencia profesional obtenida por el estudiante	
Grado de comunicación y asesoramiento mantenido con el estudiante	
Grado de coordinación con el tutor de la empresa/institución	
Duración de las prácticas	

Valoración general

* ¿Se producido algún tipo de incidencia durante el desarrollo de las prácticas? SI NO
- En caso afirmativo indique cuál:

* ¿Considera que el/la estudiante ha superado las prácticas? SI NO
- En caso negativo indique el motivo:

* Valoración general sobre el grado del cumplimiento de los objetivos de las prácticas

OTRAS OBSERVACIONES O SUGERENCIAS:

_____ a _____ de _____ de _____.

Firma:

3.6.2. Example of veterinary from the company report (COIE).



UNIVERSIDAD DE
MURCIA

Servicio de
Orientación y Empleo (COIE)

Informe final: Tutor/a de Empresa

La empresa debe cumplimentar el siguiente informe para hacer constar la realización y valoración de las prácticas por parte del estudiante.

ESTUDIANTE			
Nombre	NIF		
Titulación			
EMPRESA/INSTITUCIÓN			
RAZÓN SOCIAL			CIF
Tutor/a de la empresa			NIF
DATOS DE LA PRÁCTICA			
1º PERÍODO	Fecha inicio	Fecha fin	Total horas
2º PERÍODO y sucesivos	Fecha inicio	Fecha fin	Total horas
Confirmación tutorización			
* Usted fue asignado como tutor de empresa del estudiante ¿se ha mantenido como tutor de prácticas durante el desarrollo de las mismas? <input type="checkbox"/> SI <input type="checkbox"/> NO			
- En caso negativo: contacte con el coordinador/responsable de la empresa para realizar la modificación en https://practicas.um.es (EMPRESAS)			
Valoración de las prácticas. Para ello utilice la siguiente escala de 1 a 5, siendo 1 = el valor más negativo y 5, el valor más positivo.			
Estancia en la empresa o institución			
* Nivel de conocimientos técnicos de la titulación mostrados por el estudiante			
* Grado de adecuación entre la titulación y las funciones encomendadas			
Duración de las prácticas			
Relación e integración en el entorno laboral de la empresa			
Mejora de la empleabilidad del estudiante con las prácticas realizadas			
Grado en el que le gustaría contratar al estudiante al finalizar las prácticas			
Competencias mostradas por el estudiante			
Autonomía			
Capacidad de aprendizaje			
Capacidad de organización y planificación			
Capacidades de adaptación/flexibilidad			
Comunicación (oral y escrita)			
Habilidades interpersonales			
Iniciativa			
Motivación por el trabajo			
Preocupación por la calidad			
Resolución de problemas			
Responsabilidad y compromiso			
Trabajo en equipo			
Coordinación con la universidad			
* Coordinación con el tutor académico			
Información y atención dispensada por el COIE/Facultad			
Valoración general			
* ¿Ha cumplido el/la estudiante el total de horas previsto en las prácticas? <input type="checkbox"/> SI <input type="checkbox"/> NO			
- En caso de respuesta negativo, indique las fechas de realización de prácticas o los días que no ha asistido.			
* Valoración general del trabajo realizado por el estudiante			

OTRAS OBSERVACIONES O SUGERENCIAS:

_____, a ____ de _____ de _____.

Firma y sello

Convenio nº:

3.6.3. Example of student report (COIE).



UNIVERSIDAD DE
MURCIA

Servicio de
Orientación y Empleo (COIE)

Informe final: Estudiante

El/la estudiante ha de cumplimentar el siguiente informe para hacer constar la valoración de las prácticas realizadas.

ESTUDIANTE			
Nombre	NIF		
Titulación			
EMPRESA/INSTITUCIÓN			
RAZÓN SOCIAL			
Tutor/a de la empresa			
DATOS DE LA PRÁCTICA			
1º PERÍODO	Fecha inicio	Fecha fin	Total horas
2º PERÍODO y sucesivos	Fecha inicio	Fecha fin	Total horas

Valoración de las prácticas. Para ello utilice la siguiente escala de 1 a 5, siendo 1 = el valor más negativo y 5 , el valor más positivo.

Estancia en la empresa o institución	
* Grado de cumplimiento de los objetivos de las prácticas	
* Idoneidad de las tareas encomendadas	
Idoneidad de la empresa/institución	
Relación e integración en el entorno laboral de la empresa	
Disponibilidad de recursos para realizar las tareas	
Valoración de la experiencia profesional obtenida	
Grado en el que te gustaría ser contratado en la misma empresa/institución	
Grado en el que recomendaría realizar las prácticas externas en la misma empresa/institución	
Competencias puestas en práctica	
Autonomía	
Capacidad de aprendizaje	
Capacidad de organización y planificación	
Capacidades de adaptación/flexibilidad	
Comunicación (oral y escrita)	
Habilidades interpersonales	
Iniciativa	
Motivación por el trabajo	
Preocupación por la calidad	
Resolución de problemas	
Responsabilidad y compromiso	
Trabajo en equipo	
Tutores de Prácticas	
* Atención recibida por el tutor/a de la empresa	
Atención recibida por el tutor/a académico	
Otros aspectos de las prácticas	
En caso de haber recibido beca de la empresa por la realización de prácticas, valoración de la cuantía	
Duración de las prácticas	
Información y atención dispensada por el COIE/Facultad	
* Valoración general de las prácticas realizadas	

OTRAS OBSERVACIONES O SUGERENCIAS:

En el plazo de 15 días desde la finalización de las prácticas, deberá entregar este documento cumplimentado y firmado en el COIE

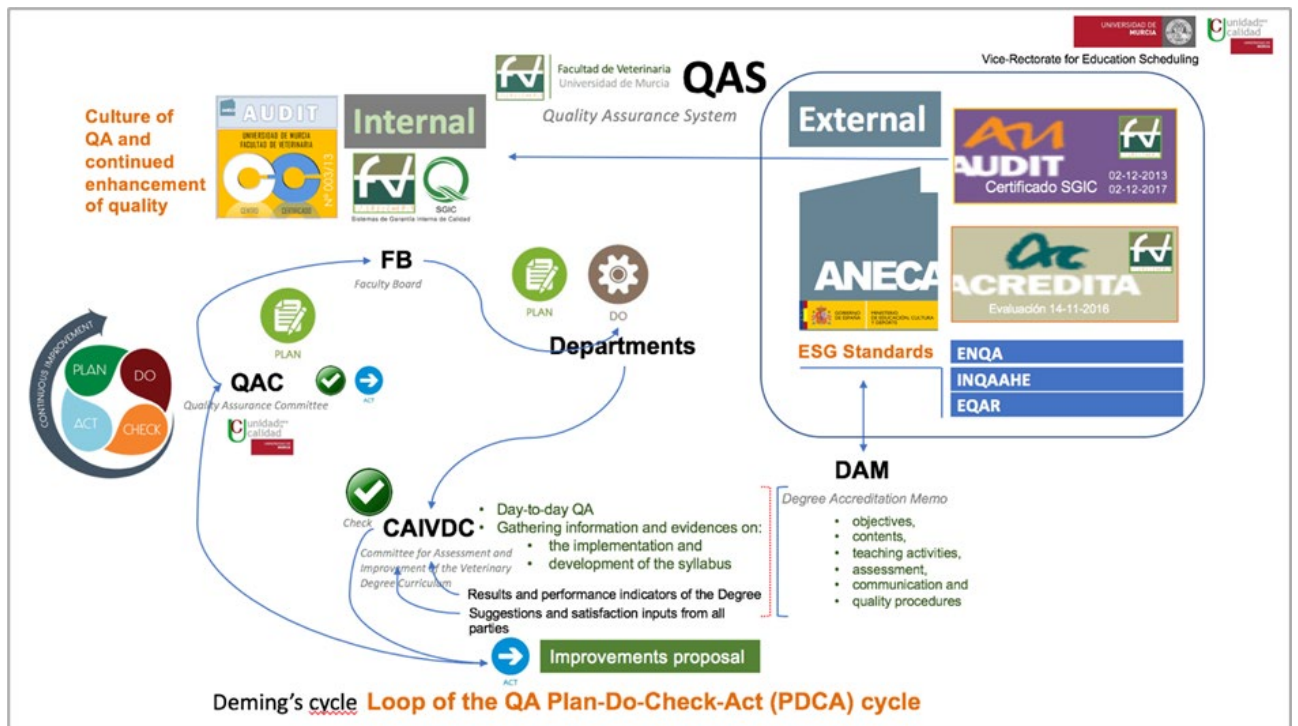
Firma:

Convenio nº:

Edif. Rector Soler - Campus de Espinardo - 30100 Murcia <https://www.um.es/web/coie/>

APPENDIX 4 Written assessment procedures for QA.

APPENDIX 4.1. Schematic diagram of FVETUM Quality Assurance System, loop of the QA Plan-Do-Check-Act cycle.



APPENDIX 4.2.

Strategic Plan FVETUM 2023-2027.

Presentation.

The primary focus of the University of Murcia's Faculty of Veterinary Medicine (FEVTUM) is to educate skilled graduates, conduct high-quality research, and facilitate knowledge transfer, all while maintaining a strong dedication to serving society. Since its establishment in 1982, the main goal of FVETUM has been to promote excellent education and training based on best practices. This is intended to provide its graduates with a high level of qualification and necessary skills that can be used on the first day of their professional practice.

After being widely recognised as a reputable training centre, both within the University (UM) and nationally, our institution became a member of the European Association of Establishments for Veterinary Education (EAEVE) in 1996. This allowed us to adopt and incorporate their quality standards, boosting our growth as a centre within UMU as well as at the national and international level. Our accreditation in 2017, approved in 2007, further reflected our adherence to these standards, which were audited in the ESVET Re-Visit with no major defects. To attain these aims, FVETUM has responded to worldwide transformations dictated by the European Higher Education Area (EHEA) and the introduction of a quality policy along with European accreditation standards.

In this pursuit, UMU devised its inaugural Institutional Strategic Plan (2007-2012) as a management structure of goals and strategies to enhance effectiveness in all levels and spheres of operation. Based on this, the FVETUM formulated its inaugural Strategic Plan for the Faculty of Veterinary Medicine between 2015 and 2018 in 2013. Within this plan, Strategic Axis 1, Teaching, aimed to prepare the faculty for European Assessment, which was successfully fulfilled in 2018 and accredited with effect from 2017 as previously noted. After completing the first plan, the faculty began collaborative work and took relevant actions to review it and prepare the second strategic plan. However, the COVID-19 pandemic significantly impacted events in March of that year. As a result, the faculty had to adopt different contingency plans until 2022, which caused delays in drawing up the second plan. Nonetheless, it is now presented. UMU has not developed a second Institutional Strategic Plan, which prevents us from obtaining guidance on updating the strategic objectives of the University as a whole. Despite recognizing the necessity of developing a Plan in line with the social, economic, labor, and professional context of UMU's programs, the institution has not yet taken action. Given text already adheres to the principles. Improving it even further would result in a repetitive sentence. Hence:

Against this backdrop, the FVETUM is drawing up this new Plan with a view to addressing the new period (4 academic years), which will be a time of change and major challenges for our Centre.

Analysis and reflections.

The 1st Strategic Plan of the FVETUM was based on 4 strategic axes (Teaching, Research, Management and Services and Social Impact) with 5, 2, 2 and 1 objectives respectively, divided into 22 strategies and a total of 52 actions. In summary, all the actions have been completed on schedule, and as proof of this, and especially the strategic axis of teaching, are summarised in the accreditation of EAEVE in 2017, the institutional accreditation of the Faculty in 2018, valid until 2024, as well as the verification of its Quality Assurance Internal System (QAIS, AUDIT) in 2018 and 2022. In addition, it is the first Faculty teaching Food Science and Technology to have the European ISEKI accreditation, which will be achieved in 2020 and valid until 2025. In this strategic axis, it is necessary to point out that its application must continue in the II

Strategic Plan of the FVETUM, since all these accreditations have an expiry date and it is necessary to renew them sufficiently in advance in order to continue to be a reference in the fields of activity of our centre. Therefore, it is necessary that there is a continuity of previously defined or partially achieved objectives:

- To maintain and improve the quality standards with the regular updating of the policy and objectives, as well as the constant work to promote the training activities of the Centre.
- Continue updating the curricula, especially the Bachelor of Veterinary Medicine, until it reaches the European standard of 360 ECTS, with its adaptation to the new Organic Law (March 2023) of the Spanish University System.
- Insist on the need for horizontal and vertical teaching coordination between the contents and competences to be acquired in each subject.
- Acting in the area of human resources, in collaboration with the Departments and the Vice-Rector's Office with teaching responsibilities, for generational renewal and their teaching and research qualifications.
- Continue the policy of updating teaching infrastructures in order to improve the resources for training in the skills of the first day of each course. Particular attention must be paid to measures to improve practical training at the UMU Veterinary Hospital and Teaching Farm.
- Invest and support investment in resources and training in biosafety, animal welfare and sustainability within the Sustainable Development Goals (SDGs).
- Apply the cross-cutting strategic lines of One Health, SDGs, animal welfare, biosafety and responsible use of antimicrobials in the training of future graduates.
- Promote postgraduate training at Masters and Doctoral level, as well as professional training with the official veterinary associations through joint programmes, in particular promoting the implementation of the School of Veterinary Professional Practice.
- Continue the relevant actions to renew the national and international accreditation of our degrees.
- Explore the possibilities of bilingual and/or DUAL education, within the limits imposed by the current economic, legal and financial situation.

In the areas of research, management and services, and social impact, it is equally necessary to continue with the objectives defined throughout the 1st Plan and, in subsequent years, included in the contingency plans during the COVID-19 pandemic. Research is an essential element of the University's activity, which must be complemented by the transfer and dissemination of knowledge to society in general and to the productive fabric in particular (companies, professionals, etc.). This activity is carried out by the University's research and transfer groups, which may not be the sole objective of the Faculty. However, the Faculty can act as a concentrator and disseminator of this information (a port or "hub") to give it visibility and create research synergies. The activation of the PLEIADES-VITALIS infrastructure has made it possible to locate research groups in food science and technology, animal health, anatomy, toxicology or veterinary medicine that have requested it, creating an ecosystem of infrastructures that make it possible to strengthen research. The UMU Veterinary Hospital has strengthened its activity by signing an agreement with the International Doctoral School, which allows doctoral theses to be carried out in its facilities, and the Veterinary Teaching Farm has extended the use of its research warehouse as a training centre for specialists from the Murcia Health Service, through a collaboration agreement. The *Anales de Veterinaria* journal of the University of Murcia serves as a tool for the dissemination of the Centre's research activities, its image has been redefined, the annual edition of the journal has been updated and, as an editorial strategy, it has begun to include, among other things, articles on the degree and master theses defended at the Centre.

Social impact must go hand in hand with care activities. Communication, presence in social activities and collaboration with other institutions are essential to have an adequate social impact that makes the value of the Faculty's activities recognisable. A current and updated website, presence on social networks and in the media (press, radio and TV) are key and we

have been working on them with the strategy of opening the Instagram channel and increasing the news and messages of the Faculty. The clearest reflection of this has been the significant increase in the number of news items and followers.

In any modern organisation it is important that users have easy and quick access to their management needs, and that processes are efficient. All procedures must be easily accessible and transparent. For this reason, an exclusive website has been created for the secretary's office, linked to the dean's office and the department, where the necessary formalities can be carried out on-line, thus reducing the inconvenience for users. Quality management includes the satisfaction of all users and especially that of teachers and students with the academic development of each course and its continuous improvement. The models implemented and accredited, as well as the improvements made in each course as a result of the analysis and proposals of teachers and students and other interest groups, make it a key element to be maintained in the II Strategic Plan. The services provided to the members of the FVETUM are not only related to management, but also to the infrastructures provided by the Centre, which are often dependent on the availability of funds. The welfare aspects of the students and staff of the Faculty, in the common study and work spaces are key to make the development of any activity more efficient and effective. In this sense, important environmental improvements have been made in terms of accessibility to the centre (new automatic doors), decoration (identification plaques, display case, urns for professional elements), study (3 new booths in the study room), or biosafety (development of the SANDACH system, cadaver donation programme...), which have allowed progress to be made in the improvement of services. These actions should be continued in the new Plan, as the objective is sufficiently broad to establish strategies to achieve it.

COVID 2019 Pandemic: Impact and lessons learned.

COVID 2019 and the forced confinement on 13 March 2020 brought an unforeseen situation for society and the University in particular, involving a drastic change in habits and the generation of multiple challenges that required rapid interventions. We had to adapt immediately to a teaching scenario for which we were neither materially prepared nor trained to deal with. We moved from face-to-face teaching to total virtual teaching from the homes of teachers and students. The academic contents had to be adapted, especially the practical activities, in order to ensure the minimum essential to achieve the competences, and we also moved to an assessment system that we were not used to and over which there were various shadows of doubt as to its correct application and effectiveness. The adaptation to new rules and procedures in the educational environment, such as the use of face masks, social distancing and restrictions on extracurricular activities, generated uncertainty and drastically affected students who, as the weakest link, needed more academic and emotional support.

In order to manage the pandemic and post-pandemic effect, four Contingency Plans were drawn up, starting in the 2019-20 academic year and ending in the 2021-22 academic year. On the Faculty's website COVID19 <https://www.um.es/web/veterinaria/calidad/covid19> you can find the periods of validity of each of them, as well as the protocols established for personal protection measures, Centres, exams or field trips <https://www.um.es/web/veterinaria/conoce-la-facultad/seguridad/pagina-covid>.

The arrival of the so-called new normality and subsequent normality has brought about major changes in the way we approach teaching. More than ever, the One Health concept and the vision of anticipating dangers by assessing their potential risks, in which Veterinary Medicine and C&T are more clearly advanced degrees than others, is more valuable than ever.

As a result, the pandemic phenomenon has led to changes and profound transformations on the way to "the new normal" and it is inferred that we could be facing a new model of teacher, ready to offer solutions, empowered by their proven resilience in the face of experience.

With regard to the role of the teacher, it should be pointed out that the pandemic has placed universities in an unprecedented situation, revealing their difficulties in adapting to a reality that is far removed from the traditional face-to-face model. In this sense, the teaching staff, as the subject involved, has been immersed in the construction of new strategies to face the replacement of the extended teaching model. Therefore, teachers have generated resilience, not only as a way of facilitating the emotional impact, not only as a personal adaptation to the changes brought about by the pandemic, but also as a way of generating new scenarios, links and stimulation of their own development and that of their students. It has also led to major changes in the way teaching is approached and the development of skills that have allowed for innovation, improved educational strategies and technological competences in comparison to traditional scenarios.

Students are also aware that the values and attitudes they have had to develop in the face of the change in educational modality are autonomy, responsibility, patience, better time management to fulfil academic tasks and obligations.

Regarding the future of universities, the teaching staff see it in the framework of a hybrid education system, where traditional forms of face-to-face and new forms of virtuality converge. In line with this vision of the future, a gap can be seen between traditional teaching in face-to-face environments and the new teaching reality oriented towards virtual environments, which should give rise to reflection on the need for a change in thinking about the educational paradigm in universities.

Our Mission.

The mission of the FVETUM is to be a establishment of Higher Education committed to quality teaching and comprehensive training in Veterinary and Food Science and Technology. The Faculty of Veterinary Medicine of the University of Murcia aims to provide adequate responses to the demands of society (European, Spanish and especially in the southeast) in the field of Animal Medicine and Health, Public Health, Agri-Food and Animal Production in areas of Mediterranean climatology. To this end, it must act in collaboration with other institutions, within a framework of respect for nature and the animal world, through the training of qualified professionals (also taking into account their specialized and postgraduate training, as well as their continuing education), research and the provision of avant-garde and quality services.

Our Vision.

The vision of the FVETUM is to provide global knowledge leadership through excellence in Veterinary and Food Science and Technology Graduate and Postgraduate Degrees in the Mediterranean, Europe and Latin America, within the spirit of the Campus of International Excellence (Campus Mare Notrum) and European Universities (EU-UniWell), and to act as a veterinary clinical reference in its closest field of action.

Achieving our vision means having our graduates recognized among the best in a global market; having society recognize that we are among the best providers of veterinary services, and in food science and technology; having a track record of innovation and clinical research recognized as a reference; and, having a management track record that is exemplary for the University of Murcia. Achieving our vision will require all of our staff to work effectively as a team, apply innovative and sound practices to manage workload in order to achieve optimal

teaching, research and service outcomes. All geared towards creating a workplace that is admired by students, staff, clients, university colleagues and the community.

Our Values.

FVETUM identifies with the institutional values of the University of Murcia of democratic participation, transparency in management, fundamental right of equality between women and men, as well as non-discrimination among its members for reasons of birth, race, religion, opinion or any other condition or personal or social circumstance. From the FVETUM we encourage the dissemination and knowledge of the Code of Ethics of the University of Murcia and the involvement of all stakeholders in achieving the values that the university has established to contribute to the development of a culture of ethics and excellence as a basis for operation. Sustainability within the Sustainable Development Goals strategy is incorporated into our curricular and extracurricular training activities as content and competencies. As values of the Faculty of Veterinary Medicine of the University of Murcia we can highlight the ethical commitment, and the interest and respect for animal welfare and the environment in the prevention of Public Health within the concept of "One Health".

SWOT Analysis.

The SWOT Analysis (Strengths, Weaknesses, Opportunities and Threats) is a valuable tool applied in strategic planning. It is used in the elaboration of the strategic diagnosis, both in its internal and external aspects. It is a simple, yet highly powerful analysis. It allows to understand the Strengths and Weaknesses, as well as to identify both Opportunities and Threats faced by the organization, or territory, object of the strategy elaboration. To further specify the elements of a SWOT analysis, we can define them as follows:

Weaknesses.

Limitation, obstacle or difficulty in the organization that will have a negative impact on its strategy.

Financing and Infrastructure

- The general decrease in economic resources and the dependence on the distribution of university funds, exacerbated by the economic crisis with energy prices, are changing the financial conditions of the universities.
- The operation and possibilities for the development of core activities may be affected in the medium term by the high operating costs of the FVETUM facilities.
- The obsolescence and aging of the equipment and infrastructure of the center may affect the competitiveness of the Faculty of Veterinary Medicine of the University of Murcia (FVETUM) and the competitiveness of the Veterinary Hospital of the University of Murcia (HVUM) and its role as a reference center.

Practical training.

- Limited capacity to maintain dairy cattle at the Veterinary Teaching Farm for practical training as the number of animals in the region is limited due to the low milk production subsidy for dairy cows.
- Difficulties in finding the perfect balance between all species due to the diversity to be covered in all aspects of Veterinary Medicine.
- Less possibilities to obtain necropsy cases of companion animals according to the Spanish legislation of animal welfare without slaughter. And of large animals due to the lower availability of transport.

Personnel and human resources

- Insufficient academic staff trained at HVUM and with European diploma to cover all clinical services.
- High turnover of veterinarians at HVUM and difficulty in building staff loyalty and retaining well-trained veterinarians.

Threats.

Aspect of the external environment, or unfavourable situation, potentially detrimental to the development of the strategy.

Internal and external academic environment.

- The growing number of Veterinary Faculties in Spain, especially the creation of another Veterinary Faculty in the same region. The proximity of this new centre in the same niche of extramural teaching resources may lead to conflicts in the medium and long term.
- The low birth rate could lead to a decrease in applications for enrolment in the medium to long term, which would result in a lower entry mark to the Faculty and thus a lower average level of enrolment.
- The general decline of the livestock sector and its decreasing importance in the GDP, together with decreasing subsidies, may lead to a reduction in the number of jobs for our graduates.

Staff and human resources

- The ageing of staff, both academic and support staff. In the next 5 to 7 years, they will need to be replaced by highly qualified veterinarians.

Practical training.

- Risk of compatibility of Official Veterinary Inspectors to receive students during their working day due to the new Spanish University Law.
- Increasing difficulties to accept students for Extramural Practical Training (EPT) due to animal welfare, biosecurity, farm management and transport.

Strengths.

Resource or capacity of the organisation that can be used for the achievement of its strategic objectives.

Accreditations and quality.

- Full national and international accreditation and a good position in national and international rankings, which translates into a high reputation and prestige, with a high demand from new students.
- The existence of a quality assurance system in place and fully operational, allowing for the systematic analysis of results and the adoption of continuous and diligent improvement plans, with mechanisms for information and communication with all internal and external stakeholders.

Internal and external academic environment.

- Good contact with students, a small cohesive campus, a family atmosphere, together with an adequate teacher/student ratio, which guarantees the quality of teaching.
- The teaching organisation of the Faculty allows students to organise their time well, helping them to make the most of their effort.
- Excellent relations with related institutions, both public and private, regulated by educational cooperation agreements that allow the implementation of curricular and extracurricular internships, as well as the development of research projects in which students can participate.
- Our students are enriched academically and culturally through the development of national and international exchange programmes.

Infrastructure and practical training.

- Fully-equipped facilities that cover all aspects of conventional veterinary medicine.
- The availability of a veterinary hospital, structured by services and staffed by qualified professionals, which allows students to develop a high-quality clinical practice.
- The availability of a multi-species Veterinary Teaching Farm at the Faculty which provides students with the appropriate environment for high added value practices, bringing them closer to the reality of animal production under normal business conditions.

Staff and human resources.

- A high percentage of teaching staff are PhDs, with accredited specialization in their respective fields of knowledge, who are also researchers of recognized prestige, and some of them with national or international diplomas.
- Leadership of national and international research groups in the agri-food sector. High quality scientific production and participation in local, regional, national and international research projects.

Opportunities.

Factor of the environment favourable to the organisation.

Reputation and curricular improvement.

- The veterinarian is a profession in high demand in Spain and there is a high demand for the degree due to its professional activity in veterinary medicine and veterinary clinic and in relation to the production of safe food.
- The full implementation of Directive 55/2013 will mean a real equalisation with minimum quality criteria in the education provided in veterinary establishments in Europe, and the achievement of a 360 ECTS curriculum, increasing practical training and expanding the offer of optional subjects.
- The growing social awareness of animal health and welfare in the field of food and pet production, as well as the social concern for food health and safety, zoonosis control and antimicrobial resistance, generate a high demand for the professionals who deal with them.

Practical training.

- The development of a more precisely managed state-of-the-art skills laboratory.
- The promotion of the cadaver donation programme in order to obtain more specimens for dissection, necropsy or surgery for the practical training of students.
- The existence of synergies with external entities such as professional associations, private primary care veterinary clinics for small animal cases, private reference horse clinics and with local wildlife reservoirs for extra-mural placements to ensure student training in all species.
- The support service for students with disabilities at university level which has been of great help to FVETUM students.

Digital transformation in education systems.

- The library facilities are of high quality with a comprehensive collection of bibliographic materials and a wide variety of e-journals available.

STRATEGIC FORMULATION

<i>Strategic axis 1: Quality training adapted to social needs</i>						
<i>Strategic Objective 1.1. To update and innovate the offer of training programmes in order to respond to social demand and scientific and technical interest</i>						
<i>Strategy 1.1.1. Review and update the range of degree courses on offer and adapt them to the needs of society</i>						
Actions	Target	Audience	Horizon	Start	End	Progress
1.1.1.1. Review the structure of the Bachelor's and Master's degrees to adapt them to the LOSU.	E+PDI	ED+CGPEV+JF	12-2023	10-2023	11-2023	100%
1.1.1.2. To make progress in the negotiations to achieve a syllabus for the Degree in Veterinary Medicine more in line with European directives. Specifically, to achieve the 360 ECTS	GVET	CDVE+D+CGPEV	2027	2020	2027	60%
1.1.1.3. Analyse and adapt the syllabus to make its contents and distribution more functional. Review the annual subjects and optional subjects.	GVET GCyTA	ED+DPT+CGPEV+JF	2027	2024	2027	--
1.1.1.4. Establish actions that enable the achievement of new training models such as DUAL.	EST	ED+CGPEV	2027	2021	2027	10%
1.1.1.5. To promote the studies of Veterinary Technical Assistant	EST+PE	DHVUM+ED	2024	2023	2024	10%
<i>Strategy 1.1.2. Review of the postgraduate and lifelong learning offer</i>						
1.1.2.1. Collaborate with the Academic Committee of the Master's Degree in Wildlife Management for its remodelling and offer in the academic year 2024-25 or 2025-26.	EST+PDI	PDI+VDC+ED	2025	2024	2025	--
1.1.2.2. Promote the creation and implementation of the School of Veterinary Professional Practice with the Official Veterinary Associations in the area of influence, especially that of the Region of Murcia.	GRAD+PDI	ED	2024	2019	2024	15%
1.1.2.3. To increase the Faculty's strategic training alliances through agreements with organisations, associations and entities, in order to respond to the demands of students and professionals.	EST+GRAD	ED+DPT+PDI	2027	2019	2027	50%

1.1.2.4. Drawing up a specific continuous training programme in collaboration with the University of Madrid, the College and other organisations, associations and entities, in order to respond to professional demands.	GRAD+PDI	VDC+DHV UM	2027		2027	
1.1.2.5. Promote micro-credentials and skills-based learning as a flexible and inclusive learning opportunity within the European Higher Education framework.	EST+GRAD	ED+PDI				

Strategic Objective 1.2.

To ensure the quality of the academic training of the Faculty's degrees

Strategy 1.2.1. Revalidate the national and international accreditations of the degrees taught at the Faculty

Actions	Target	Audience	Horizon	Start	End	Progress
1.1.2.1. Re-accreditation of the Degree in Veterinary Medicine by the EAEVE. Preparation of the self-evaluation report (Self Evaluation Report, SER) based on the 2023 SOP.	GVET	ED+JF	12-12-2023	08-06-2023	12-12-2023	
1.1.2.2. Approval and referral of the SER to the EAEVE.	GVET	JF+ED	12-12-2023	08-06-2023	12-12-2023	
1.1.2.3. Re-accreditation of the Degree in CyTA by ISEKI. Preparation of the self-report	GCyTA	ED+CAC+JF	08-2025	09-2024	08-2025	
1.1.2.4. Approval and submission of the self-report to ISEK	GCyTA	JF+ED	08-2025	06-2024	07-2025	
1.1.2.5. Re-accreditation of Institutional Accreditation (IA) by ANECA. Preparation of the self-report	GRADOS+MAS TERES	ED+JF	11-2024	2023	11-2023	
1.1.2.6. Approval and submission of the AI self-report to ANECA.	GRADOS+MAS TERES	JF+ED	03-2024	01-2024	03-2024	
1.1.2.7. Periodic review of teaching infrastructure needs for Accreditation and request for institutional support (Vice-rectorate) for Accreditation visits.	GVET	ED	2024	2019	2024	50%

Strategy 1.2.2. Improvement of spaces, methodologies and teaching resources that favour learning

1.2.2.1. Improvement of teaching equipment in three essential areas: classroom, computer and practical laboratory resources. -Application for aid from the UMU's international quality seal. -Applying for UMU quality grants.	EST	ED-VDC	2027	2019	2027	50%
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- Support for requests for practical equipment from Departments linked to Centre.						
1.2.2.2. Investment in PPE for practices to ensure compliance with biosafety protocols.	EST+PDI+PTGAS	ED	2027	2019	2027	50%
1.2.2.4. Strengthening of the clinical skills laboratories (Skill lab).	EST	DPT+VRC+ED	2027	2019	2027	40%
1.2.2.5. Optimization of the teaching spaces dependent on the Faculty.	EST	ED+VRC	2027	2019	2027	40%
1.2.2.6. Monitoring the needs of the HCV and GDV, as well as supporting their requests.	EST+PDI	D+DGV+DHV+VRC	2027	2019	2027	
1.2.2.7. Supervision of the installation of the research groups in the PLEIADES-VITALIS complex and the use of the spaces freed up for teaching activities.	GI	D+GI	2027	2019	2027	70%
1.2.2.8. Request the completion of the adaptation of the Faculty to an efficient use of energy (led lights, insulation of doors and windows...) and accessibility.	EST+PDI+PTGAS	ED+VRC	2027	2019	2027	60%
1.2.2.9. Identify and promote horizontal and vertical coordination of the contents of the subjects through meetings in the same course and between courses, as well as promoting ways to favour interdisciplinary relations with the aim of facilitating the exchange of experiences and the proposal of transversal training actions..	EST+PDI	VDC	2027	2019	2027	20%
Strategy 1.2.3. Adaptation and training of the PDI and PTGAS						
Actions	Target	Audience	Horizon	Start	End	Progress
1.2.3.1. Promote continuous teacher training plans for the proper development of their teaching activity, paying special attention to new methodologies, languages and digitalisation.	PDI	ED	2027	2019	2027	
1.2.3.2. Promote vocational training schemes in the PTGAS.	PTGAS	ED	2027	2019	2027	
1.2.3.3. Collaborate in the improvement of the teaching staff of the Departments with special attention to the incorporation of specialized personnel in the fields of clinical, zootechnical and hygienic knowledge in the Degree in Veterinary Medicine.	PDI	ED	2027	2019	2027	50%

1.2.3.4. Continue to apply for recognition of the clinical teaching staff's work in health care.	PDI	ED	2027	2019	2027	
1.2.3.5. Establish formal frameworks to allow for the compatibility of associate and substitute teaching staff.	PDI	D+ ED	2027	2019	2027	
1.2.3.6. Optimise the functions of the PTGAS and its adaptation to the needs of the Faculty.	PDI	D+ ED	2027	2019	2027	

Strategic axis 2: People and governance, as well as financial, service and management resources

Strategic Objective 2.1.

Promote the improvement of public and private funding

Strategy 2.1.1. Expand real cost funding of faculty management and external sponsorship/collaboration

Actions	Target	Audience	Horizon	Start	End	Progress
2.1.1.1. Review with Management and Finance the University's allocation to the Faculty and the GDV, and demand adaptation to the real costs of additional investment in biosafety, quality and real costs in analytical accounting.	EST+PDI	D+ED	2027	2019	2027	30%
2.1.1.2. Support the involvement of Trustees in the financing of HVUM.	HVUM+EST	D+VDC	2027	2019	2027	10%
2.1.1.3. Establishment of sponsorship agreements or agreements that involve a financial contribution for the development of the centre's activities. Promote the patronage medal and business recognition of collaboration with the Faculty.	EST+PDI+PTGAS	D+ED	2027	2019	2027	50%

Strategic Objective 2.2.

To strengthen and recognize the administrative management and internal services of the Faculty

Strategy 2.2.1. To make visible, promote and recognise the management and administration services of the Faculty

Actions	Target	Audience	Horizon	Start	End	Progress
2.2.1.1. Promote and update the on-line services offered by the Secretariat on its website.	EST+PDI+PTGAS+EXT	S+ED	2027	2019	2027	90%

2.2.1.2. Optimise booking, reprographic, transport and material services and structure them in a Faculty services website.	EST+PDI+PTGAS	S+ED	2027	2019	2027	80%
2.2.1.3. Continue the reduction of paper in management processes and its replacement by comprehensive digital management.	EST+PDI+PTGAS	S+ED	2027	2019	2027	80%
Strategic Objective 2.3. <i>Increase commitment to quality management and account reduction</i>						
Strategy 2.3.1. Promoting a culture of quality in the management of the Centre						
Actions	Target	Audience	Horizon	Start	End	Progress
2.3.1.1. Apply quality management models in the centre's processes.	EST+PDI+PTGAS+EXT	S+ESEC+ED	2027	2024	2027	
2.3.1.2. To deepen the policy of transparency and accountability by creating an institutional climate that favours the communication of the governance strategy and the participation of faculty members.	EST+PDI+PTGAS+EXT	ED	2027	2023	2027	
Strategic Objective 2.4. <i>Promote the well-being and safety of staff and student</i>						
Strategy 2.4.1. Establish programmes to improve the welfare and safety of staff and students.						
Actions	Target	Audience	Horizon	Start	End	Progress
2.4.1.1. Update and modernize the version of biosafety and self-protection protocols.	EST+PDI+PTGAS	VDC	2027	2023	2027	20%
2.4.1.2. Strengthen cross-cutting biosafety training at the Centre	EST+PDI+PTGAS	VDC	2027	2023	2027	
2.4.1.3. Generate a social space for students and review partnership spaces for their optimization.	EST	ED	2027	2023	2027	

Strategic axis 3: Research and collaboration with business						
Strategic Objective 3.1. Strengthening research activity						
Strategy 3.1.1. Promote research activities and their dissemination by students						
Actions	Target	Audience	Horizon	Start	End	Progress
3.1.1.1. Promote the development of Bachelor's and Master's Degree Final Projects on research topics linked to GI and its research projects.	EST	VDC	2027	2019	2027	70%
3.1.1.2. To make research activities visible in scientific dissemination events (The night of researchers, Science and Technology Week,...).	SOC+EST+PDI	ED+GI	2027	2019	2027	50%
3.1.1.3. To encourage the publication of research derived from the TFG and TFM with an outstanding score in <i>Anales de Veterinaria de Murcia</i> .	EST+PDI	VDC	2027	2019	2027	50%
3.1.1.4. Support the holding of congresses, conferences, talks... organised by students and their associations.	EST	ED	2027	2019	2027	50%
Strategy 3.1.2. Promote the visibility and synergies of research activities and their dissemination by the Centre's researchers and transfer.						
Actions	Target	Audience	Horizon	Start	End	Progress
3.1.2.1. Promote the Faculty's website of research projects and groups https://www.um.es/web/veterinaria/investigacion/proyectos as a catalogue for research dissemination and cooperation.	PDI	ED	2027	2020	2027	10%
3.1.2.2. Create a section of services and transfer of the Faculty's groups. Motivate internal research clusters.	PDI	ED	2027	2024	2027	
3.1.2.3. Maintain the attraction of publications and its annual periodical publication of the journal <i>Anales de Veterinaria</i> and make progress in the steps taken towards indexing in national and international directories, as well as achieving the impact index..	PDI+EXT	VDC	2027	2018	2027	20%
3.1.2.4. Support the creation of UMU Research Institutes in the One Health and Food areas with the participation of researchers linked to the Faculty.	GI	D+GI+VDC	2027	2023	2027	10%
Strategic Objective 3.2. Promote the use and efficiency of research spaces dependent on or related to the Faculty						
Strategy 3.2.1. Attracting research users to the Faculty's research infrastructures						
Actions	Target	Audience	Horizon	Start	End	Progress

3.2.1.1. Make arrangements to support the maintenance of the GDV's Experimental Building..	PDI+EST	ED+DGDV	2027	2019	2027	30%
3.2.1.2. Establish promotion and agreements for research and training in the GDV.	PDI+EXT	ED+DGDV	2027	2019	2027	30%
Strategy 3.2.2. Efficiency in the use of research facilities by the research groups						
3.2.2.1. Supervise compliance with the use of Pleiades and Vitalis facilities by the IGs of the Faculty and UMU.	GI	D	2027	2019	2027	70%
3.2.2.2. Support and promote the actions of the Faculty's IGs to improve their research and transfer activities.	GI	ED+VDC+ GI	2027	2024	2027	%

Strategic axis 4: Faculty identity and the relationship with society

Strategic Objective 4.1.

Strengthen the Faculty's strategic and extra-university participation and volunteering activities

Strategy 4.1.1. Promote the activities of participation in the life of the Faculty and University of the members of the Faculty

Actions	Target	Audience	Horizon	Start	End	Progress
4.1.1.1. Maintain and promote participation in the Faculty's horizontal strategic activities such as One Health, Animal Welfare, Biosecurity, Antimicrobial Resistance Awareness and Sustainable Development Goals.	EST+PDI+PTGAS	ED	2027	2019	2027	20%
4.1.1.2. Continue with artistic and cultural activities such as the Christmas drawing and San Antón photography competitions in collaboration with the ICOVRM and other entities. Promote the development of sporting and cultural activities.	EST+PDI+PTGAS	ED	2027	2019	2027	50%
4.1.1.3. Making visible and attracting people to the activities organised during San Francisco Week.	EST+PDI+PTGAS	ED	2027	2019	2027	50%
4.1.1.4. Strengthen both internal (Hospital) and external (EDU-CAN-DOG) volunteer programmes and new initiatives that are generated.	EST	VDC	2027	2019	2027	50%
4.1.1.5. Consolidate the management of Re-CRAUs originating in the Faculty.	EST	ED	2027	2023	2027	50%

4.1.1.6. Attract students to the activities of the Student Orientation Plan both in the first year (Welcome Week and Preparation for the Degree) and in the rest of the courses.	EST	ED	2027	2019	2027	50%
Strategy 4.1.2. Support and encourage the Faculty's associations						
Actions	Target	Audience	Horizon	Start	End	Progress
4.1.2.1. Organise the use of the spaces of the Faculty's associations according to their activity.	EST	ED+EST	2027	2023	2027	50%
4.1.2.2. Reactivate IVSA and the internationalisation of student relations.	EST	ED+EST	2027	2021	2027	15%
Strategic Objective 4.2. <i>To increase collaboration with professional associations, scientific bodies and associations in the veterinary and agri-food fields, and with graduates of our Centre</i>						
Strategy 4.2.1. Strengthen relations through agreements, partnerships and joint programme						
Actions	Target	Audience	Horizon	Start	End	Progress
4.2.1.1. Consolidate the pre-registration programme and propose a mentoring programme with the ICOVRM.	EST	ED	2027	2021	2027	70%
4.2.1.2. Extend collaboration agreements with entities and associations for student training and internships.	EST	ED+VDC	2027	2019	2027	50%
4.2.1.3. Extend the meetings with alumni and the XXV Anniversary events of the graduating classes.	GRAD	ED	2027	2019	2027	50%
Strategic Objective 4.3. <i>To strengthen the Faculty's internal and external communication strategy</i>						
Strategy 4.3.1. Strengthen the identity and values of the faculty						
4.3.1.1. Involve students, teaching and research staff and PTGAS in the Faculty's moments of greatest social impact.	EST+PDI+PTGAS	ED	2027	2019	2027	50%
4.3.1.2. Promote participation and socialisation activities among faculty members.	EST+PDI+PTGAS	ED	2027	2019	2027	50%
4.3.1.3. Improve information and dissemination of national and international calls and opportunities for faculty members.	EST+PDI	ED	2027	2019	2027	50%
Strategy 4.3.2. Improve the external dissemination of the life and activities generated by the members of the faculty						

4.3.2.1. To keep the Faculty website updated with the activities generated by the members of the Faculty.	EST+PDI+PTGAS+EXT	ED	2027	2019	2027	70%
4.3.2.2. Generate greater loyalty to the monitoring of the activities and news generated in the Faculty in the consolidated Social Networks (Instagram, Facebook, X or LinkedIn) and explore others of interest.	EST+PDI+PTGAS+EXT	D	2027	2019	2027	70%
Strategic Objective 4.4. Strengthen the HCV's healthcare activity as a regional benchmark						
Strategy 4.4.1. Support dissemination actions and liaise with partners of veterinary clinical care interest						
4.4.1.1. To disseminate HCV information and services on social networks and in the media.	EST+PDI+PTGAS+SOC	D	2027	2019	2027	50%
4.4.1.2. Identify and provide contacts that can help establish clinical collaborations with HCV.	HVUM+EST+PDI	D+VDC+DHVUM	2027	2019	2027	50%

Abbreviations:

D: Dean of Faculty; DGDV: Directorate of the Veterinary Teaching Farm; DHVUM: Directorate of the University of Murcia Veterinary Hospital; ED: Dean's Team; ESEC: Secretary and Dean's Team; EST: Students; GCyTA: Degree in Food Science and Technology; GDV: Veterinary Teaching Farm; GI: Research Groups; GRAD: Graduates; GVET: Degree in Veterinary Science; HVUM: Veterinary Hospital University of Murcia; JF: Faculty Board; PDI: Teaching and Research Staff; PE: External Staff; PTGAS: Technical, Management and Administration and Services Staff; S: Faculty Secretary; SOC: Society in general; VDC: Vice-Dean with Competences in the subject; VRC: Vice-Rector with Competences in the subject.

APPENDIX 4.3.

Operating Regulations of Quality Assurance Commission FVETUM.

OBJETIVE AND COMPOSITION

Aim and functions

Aim

1. The purpose of this Regulation is to govern the organization and operating procedures of the Quality Assurance Commission (QAC) of the Faculty of Veterinary Medicine of the University of Murcia (FVETUM).
2. The FVETUM's Quality Commission is the primary committee responsible for assessing and advancing teaching quality at the VEE through the establishment of a Quality Assessment Internal System (QAIS). The QAIS appraises and regulates outcomes employing predefined procedures detailed in the QAIS Manual.

Legal framework

The QAC of the FVETUM is governed by the Organic Law 6/2001 of December 21st, Universities (BOE of December 24th of 2001), the Statutes of the UM, approved by its Government Council (GC) the 24th of March of 2004 and the Statutes of FVETUM approved also by the GC of UM the 14th of October of 2005 and modified the 13th of February of 2009. The Manual for QAIS was first edited the 20/12/07, revised and complemented again in 16/04/08, 05/03/12, 17/12/15, 10/12/18, 07/07/20 and 23/11/23.

Functions

The QAC of the FVETUM has various functions, among others:

- 1) To conduct follow-up of the QAIS of the Degrees taught at the FVETUM.
- 2) To manage and coordinate all aspects related to this system and assure the compliance with general requirements of the QAIS Manual, the policy and objectives of Quality Assurance (QA) and requirements included in the national guides for verification and certification.
- 3) Analyze the information received from the Dean about Policy and General Objectives of QA of the FVETUM and spread it throughout the Centre and monitor its implementation.
- 4) To carry out the follow-up and evaluation of the quality objectives of the Degrees taught at the FVETUM through monitoring the efficacy of processes and its performance indicators.
- 5) Study the information received from the Dean about projects of organization changes and pronounce about them.
- 6) Control of each corrective or preventive action implemented due to the QAIS.
- 7) To study and make proposals for review and improvement of Degrees, and follow up on them, after being approved by the Faculty Council.
- 8) To propose and modify the quality objectives of the Degrees taught at the FVETUM.
- 9) Decide the frequency and duration of satisfaction surveys for the various groups of interest.
- 10) Gather information from the Quality Coordinator about the results obtained in satisfaction surveys and propose improvement proposals criteria that can be derived from those results.
- 11) To collect information and evidence on the development and application of the training programs of the Degrees taught at the FVETUM (objectives, development of teaching, learning outcomes and others).
- 12) To oversee the Information System of the Degrees taught at the FVETUM.
- 13) To establish the quality policy of the Degrees taught at the FVETUM, in accordance with the quality policy of the UM.

In particular, the Quality Assurance Commission of the FVETUM will perform the following functions:

- 1) Annual elaboration of a report of the actions developed by the Commission.

- 2) Annual elaboration of a report on the progress of the teaching of the degrees offered at the FVETUM, along with a plan for improvements thereof, which shall be submitted for approval to the Faculty Council.
- 3) Preparation of reports to monitor the implementation of improvements proposed and approved by the Faculty Council.
- 4) Adoption of decisions and, where applicable, decisions in relation to the claims and suggestions presented.
- 5) Adoption of the proposals to modify the Operating Regulations of the Quality Commission.
- 6) All other functions included in the QAIS of the qualifications given at the FVETUM, as well as those assigned to the Commission through any provisions applicable to the advancement of this System and explicitly designated to the Commission.

Members and Responsibilities

1. *The members of the Quality Commission of the FVETUM are:*

- Dean or Delegate
- Vice-dean for Quality Assurance of the FVETUM
- Academic Secretary of the FVETUM that will be the Secretary of the Commission.
- Responsible of Coordination of the Degree in Veterinary.
- Responsible of Coordination of the Degree in Food Science and Technology.
- Responsible of postgraduate education of the FVETUM.
- Responsible of Coordination of each Master or Postgraduate Programme
- A representative of each departmental section (Directors) that mainly teach at FVETUM.
- A representative of teachers with permanent link.
- A representative of support staff.
- A representative of students of the Veterinary degree proposed by the official delegation of FVETUM students among those who attend the last two courses of the degree.
- A representative of students of the Degree in Science and Technology of Food proposed by the official delegation of students of the FVETUM among those who attend the last two courses of the degree.
- A representative of postgraduate students proposed by the official delegation of students of the FVETUM among those who study official postgraduate courses taught at the centre.
- As a consultant, a member of Quality Assessment Unit of the UM.
- Three representatives of the external stakeholder group.

Likewise, the members of the QAC shall be appointed by the Faculty Council. The duration of the term will be 2 years from the designation, except in the case of the students, whose terms will be of 1 year (considering that the students can be of the last year or of master).

The QAC members of FVETUM are not permitted to assign the functions of representation recognized to them, except when specifically, authorized through an agreement that has been validly adopted for each individual case by the Quality Assessment Commission.

2. The President

The President will be the Dean or Delegate assuming the functions of Presidency of the QAC. The president of the Quality Commission of the FVETUM will:

- a. Exercise the representation of the Quality Assessment Commission.
- b. Decide the meeting call of ordinary and extraordinary sessions and the agenda, considering, where appropriate, the requests of other members made sufficiently in advance.
- c. Preside over the sessions, to moderate debates and to suspend them for justified reasons.
- d. Resolve with his vote the ties, in order to adopt agreements.
- e. Ensure compliance with the legal framework.
- f. Certify the minutes and certifications of the agreements of the QAC.

- g. Invite those who can report on specific topics to attend meetings of the Commission. In no case, shall the persons invited have the right to vote.
- h. Exercise as many other functions that are inherent to his status as President of the QAC.
- i. Exercise the rights that correspond to him as a member of the QAC of the FVETUM.

The QAC may appoint from among its members a Vice-President. In the event of a vacancy, absence, sickness or other legal cause, the President shall be replaced by the Vice-President, and in his absence, by the member of this commission of higher category, seniority and age, in this order, among its members.

3. The Secretary

The QAC of the FVETUM will have a Secretary who will have the following competencies:

- a. To attend meetings with voice but without vote if he/she does not have the status of member of the Commission, and with voice and vote if the Secretary is member of the Commission.
- b. To make the call of the sessions by order of its President, as well as the summons to the members of the Commission.
- c. To receive the acts of communication of the members with the Quality Commission and, therefore, the notifications, requests of data, rectifications or any other type of documents of which it should have knowledge.
- d. To prepare the dispatch of the issues, to draft and to authorize the minutes of the sessions.
- e. To issue certifications of approved consultations, judgments and agreements.
- f. To assist and to advise the Quality Commission of the FVETUM in the execution of its duties.
- g. If the Secretary is a member of the Quality Commission, he/she will exercise those rights that correspond as such.
- h. Other functions inherent to the status of Secretary.

The appointment and cessation of the Secretary shall be made by agreement of the QA Commission. In cases of vacancy, absence, illness or other legal cause, the Secretary shall be replaced by the member of the QA Commission appointed for this purpose, at the proposal of the President.

4. External Agents

External Agents will participate in the meetings of the Quality Commission, and especially in those related to decision-making, review and proposals for the improvement of the Degrees.

5. Rights of the members of the Quality Assurance Commission

The members of the QAC shall have the right to:

- a) Receive, with a minimum of 48 hours in the event of ordinary sessions and 24 hours in the extraordinary sessions, the call of meetings and the agenda.
- b) Have at their disposal, in the same period, all the documentation containing the necessary information for the treatment of the matters that appear in the agenda.
- c) Participate in the debates of the sessions.
- d) Exercise their right to vote and to formulate their particular vote, as well as to express the meaning of their vote and the reasons that justify it. The exercise of the vote is personal and non-transferable.
- e) Formulate requests and questions.
- f) Obtain the necessary information to fulfil the assigned functions.
- g) Other functions inherent to their condition.

6. Responsibilities of the members of the QAC

The responsibilities of the members of the Quality Assurance Commission are:

- a) To attend the sessions of the Commission, as well as to contribute to its normal operation, participating in as many activities as are necessary.
- b) To submit to the Commission the issues that affects it.

- c) To keep secrecy in cases where the nature of the information so requires.
- d) To refrain from intervening in the decisions of the Commission when incurring in any of the cases provided for in the legislation of the legal regime of public administrations.

OPERATION OF THE QUALITY ASSURANCE COMMISSION (QAC)

Meetings

1. The QAC of the FVETUM will meet in ordinary and extraordinary sessions.
2. In ordinary sessions, it shall meet at least twice in each academic year, coinciding with the end of each semester approximately.
3. The QAC shall meet in extraordinary sessions at the initiative of the President or at the request of a minimum of 20% of the total membership. These meetings shall be convened at least twenty-four hours in advance and shall contain the agenda of the meeting.
4. For reasons of urgency, the President may, with the agreement of the Commission, be able to call a new meeting orally during a meeting, sending urgent notification to the non-attending members.

Call and Agenda.

1. The members of the QAC must receive the call, with the agenda, at least 48 hours in advance, except in the case of extraordinary sessions that will be 24 hours.
2. The call, together with the agenda and the corresponding documentation, will be made by any means that allows make a record of receipt. Whenever available means permit, the call and the remaining documents will be sent by electronic means, being the originals deposited in the respective secretariat at the disposal of the members.
3. The agenda shall be set by the President and shall necessarily include those points that have been requested by 20% of the members of the Quality Commission. No matter not included in the Agenda shall be subject to deliberation, voting or agreement, unless all the members of the Quality Commission are present and the urgency is declared by the favorable vote of the majority of the members.
4. The Agenda may specify which matters may be approved, if there is no opposition, without the need for deliberation.

Electronic communications.

1. Communications to the members of the Quality Assurance Commission will be practiced using the telematic means that the University makes available to the university community. The member of the Quality Commission who does not have the means or does not want to receive the documentation by telematic means will communicate it to the Secretary of the Commission. For that purpose, once their designation has been made, the members of the Commission shall provide the Secretary with an e-mail address, to which communications shall be addressed. The members of the QAC shall communicate to the Secretary any changes in the e-mail address that may occur.
2. The telematic communication to the members of the Quality Commission will only be valid if there is evidence of reception, dates and the full content of the communications, and the sender and the recipient are reliably identified.
3. The communication shall be understood to be performed for all legal purposes at the time of access to its contents in the electronic address provided. When there is a record of receipt of the notification in the electronic address, four calendar day's elapse for ordinary session calls and twenty-four hours for extraordinary session calls, without access to its content, it will be understood that the notification has been rejected, unless the technical or material impossibility of access is established.

Development of sessions.

1. The QAC will be validly constituted for the purpose of holding sessions, deliberations and making agreements, at first call when at least half of its members, the President and the Secretary are present, and at second call, half an hour later, when at least one-third of its members, the President and the Secretary are present.
2. Participation in deliberations and voting is personal and non-delegable.
3. No one shall be interrupted while speaking, except by the President.
4. In order to proceed to the discussion, the President shall open a series of speeches. In view of the requests, the President may determine the time limitations of their use.
5. The closure of the discussion may be agreed upon by the President, upon prior notice, once those who have requested the floor or have renounced.
6. Once the discussion has been closed, the President will present the proposal or proposals that are the subject of a vote.
7. The members of the Quality Assurance Commission may be called to order when they interrupt or otherwise alter the order of the sessions or when they intend to continue speaking after they have been withdrawn. After having been warned three times at the same Session, the President may impose a ban on attending the rest of the session.

Order issues.

1. Order issues shall be considered, inter alia, the proposed postponement of the debate, the limitations on the interventions, the proposal for suspension or the proposal for a vote.
2. Points of order shall be decided, if necessary, by show of hands.

Agreements.

1. The agreements shall be adopted by simple majority, by assent or by public vote by show of hands, at the proposal of its President. In case of a tie the president has a casting vote. In any case, the proposed modification of the Operating Regulations of the Quality Assurance Commission will require its approval by an absolute majority.
2. Exceptionally, agreements can be adopted by secret ballot upon request of any member. Voting related to individuals is always confidential. A proposal put forward by the President will be considered approved by assent if no member raises objection or opposition or requests a vote.
3. Upon the announcement of the beginning of a vote by the President, no member may interrupt it except to raise a point of order relating to the way the voting is being conducted.
4. No matter that is not expressly included in the Agenda can be voted, unless all the members of the Commission are present, it is proposed at the beginning of the session, and the urgency of the matter is declared by the favourable vote of the Commission by majority.

Minutes.

1. Minutes of each meeting held by the Quality Assurance Commission of the FVETUM shall be recorded by the Secretary, who shall necessarily specify the attendees, the agenda of the meeting, the circumstances of the place and the time at which it was held, the Points of the deliberations, as well as the content of the agreements adopted.
2. The minutes shall contain the agreement or agreements adopted. Likewise, at the request of the respective members of the Commission, a vote contrary to the agreement, their abstention and the reasons justifying it, or the sense of their favourable vote shall be included. Any member has the right to request the full transcription of his intervention or proposal, provided that he/she furnishes, at the time, or within the term indicated by the President, the text that corresponds faithfully to his intervention, thus recording in the minutes or joining a copy to the same.

3. Members who disagree with the majority agreement may formulate a private vote in writing within forty-eight hours, which shall be incorporated into the approved text. Individual votes shall be limited to explaining the reasons for the discrepancy.
4. When the members of the QAC vote against or abstain, they will be exempt from any responsibility that may arise from the agreements, if any.
5. The minutes shall be approved at the same or at the next session, although the Secretary may nevertheless issue certification on the specific agreements that have been adopted, without prejudice to the subsequent approval of the minutes. In the certifications of agreements issued prior to the approval of the minutes, this circumstance shall be expressly stated.
6. The Minutes shall be signed on the last page and in the margin of each of the others, by the Secretary and shall be endorsed by the President. The sheets should be numbered sequentially, starting with number 1. The minutes will be filed in the secretariat of the Commission under the responsibility of the Secretary.
7. The Secretary shall send a copy of the minutes of each session to all members of the Commission as soon as possible, and in any case, together with the convening of the next session of the QAC at which it is to be approved.
8. The minutes of one session shall be approved at the beginning of the next session.
9. Any member of the Quality Assurance Commission who does not agree with the content of the Minutes may request in writing any modifications that may be considered. The Secretary may not estimate the correctness of the amendments, in which case may reasonably reject the amendments that arise.

Agreement effects.

1. The agreements and decisions adopted by the Quality Commission will have the appropriate effects according to their content and that established in current regulations.
2. The agreements and decisions adopted by the Quality Commission will be communicated to the interested parties to make the necessary changes and improvements. They will also be submitted to the Faculty Council for its knowledge and, if necessary, for ratification.

ACTING QUALITY ASSURANCE COMMISSION

Acting Intervention

The members of the QAC, once their term has expired, will remain acting until the election of the new members and will limit their management to the adoption of agreements on procedural matters, refraining from adopting, unless duly accredited cases of urgency or reasons of general interest for the Degrees, whose accreditation expressly justifies it.

MODIFICATION OF THE OPERATING REGULATIONS OF THE QAC

Modification of the Operating Regulations

The proposal to modify these operating regulations will require the favourable votes of most of the members of the Quality Assurance Commission of the FVETUM. Once approved, the proposal will be submitted to the Faculty Council for approval.

IDENTIFICATION OF GROUPS OF INTERESTS

Group of interests refers to every individual, group or institution having a vested interest in the Faculty, its teaching and training, and the outcomes achieved. The following table displays the groups of interest as well as the factors to analyze in diverse QAIC processes.

<i>Group of interest</i>	<i>Important aspects to consider by the QAIS</i>
<i>Students</i>	Student selection and admission, academic training, organization and development of teaching, learning support systems, results of education, labour entry and satisfaction.
<i>Teaching and Support Staff</i>	Student selection and admission, academic training profile, organization and development of teaching, learning support systems, teaching and support staff, resources, progress and academic performance, results of education, information systems, labour entry and satisfaction-
<i>Faculty Board</i>	Educational offer, teaching and support staff, resources, results analysis and information provided.
<i>Employers</i>	Educational offer, academic training profile, quality of training, labour entry and satisfaction.
<i>Graduates</i>	Educational offer, academic training profile, quality of training, labour entry and satisfaction.
<i>Public Administrations</i>	Educational offer, academic training profile, teaching and support staff, progress and academic performance, quality of training, graduate labour entry and spending.
<i>General Society</i>	Educational offer and demand, progress and academic results and labour incorporation.

APPENDIX 4.4.

Operating Regulations Committee for Assessment and Improvement of the Veterinary Degree Curriculum.

OBJETIVE AND COMPOSITION

Aim and functions

Aim

1. The purpose of this Regulation is to regulate the organization and operation of the Committee for Assessment and Improvement of the Veterinary Degree Curriculum (CAIVDC), Faculty of Veterinary Medicine (FVETUM) of University of Murcia (UM). The CAIVDC is the maximum responsible for the teaching quality of the Degree in Veterinary Medicine in the FVETUM.

Legal framework

The CAIVDC is governed by the Organic Law 6/2001 of December 21st, Universities (BOE of December 24th of 2001), the Statutes of the UM, approved by its Council of Government the 24th of March of 2004 and the Statutes of FVETUM approved by the Government Council of UM the 14th of October of 2005 and modified the 13th of February of 2009 by the current Operating Regulations, as well as by any provisions that may be issued in the development of said rules.

Functions

The CAIVDC shall have the following functions, among others:

- 1) To carry out the follow-up of the Internal Quality Assurance System of the Degree in Veterinary Medicine.
- 2) To manage and coordinate all aspects related to this system.
- 3) To carry out the follow-up and evaluation of the quality objectives of the Degree in Veterinary Medicine.
- 4) To make proposals for review and improvement of the Degree and follow up on them.
- 5) To propose and modify the quality objectives of the Degree in Veterinary Medicine.
- 6) To collect information and evidence on the development and application of the training programs of the Degree in Veterinary (objectives, development of teaching and learning outcomes and others).
- 7) To manage the Information System of the Degree in Veterinary.
- 8) To establish the quality policy of the Degree in Veterinary, in accordance with the quality policy of the FVETUM and the UM.

In particular, the CAIVDC will perform the following functions:

- 1) Annual elaboration of a report of the actions developed by the Committee.
- 2) Annual elaboration of a report on the progress of the teaching of the Degree in Veterinary Medicine, as well as a plan for improvements thereof, which shall be submitted for approval to the Faculty Council.
- 3) Preparation of reports to monitor the implementation of improvements proposed and approved by the Faculty Council.
- 4) Adoption of decisions and, as the case may be, decisions in relation to the claims and suggestions presented.
- 5) Adoption of the proposals to modify the Operating Regulations of the CAIVDC.
- 6) All other functions included in the Quality Assurance Internal System Manual of the qualifications given at the FVETUM, as well as those attributed to the Committee by whatever provisions are issued in the development of said System and that expressly to the Committee.

Members. Rights. Responsibilities

1. Members

The members of the CAIVDC are:

- Responsible of Coordination of the Degree in Veterinary (Vice-dean)
- Teachers, coordinators of subjects of the Degree, designated each one by their respective Departments and Departmental Section.
- Two representatives of students of the Degree in Veterinary Medicine proposed by the official delegation of FVETUM students among those who attend the last two courses of the degree.
- The Head of Student Secretary of the FVETUM.
- A representative of the Official College of Veterinary Surgeons of Madrid, whose Presidency will propose a list of which will be designated by the Faculty Council.
- A representative of support staff
- And three external members related with the degree

Likewise, the members of the CAIVDC shall be appointed by the Faculty Council. The duration of the term will be 2 years from the designation, except in the case of the students, whose terms will be of 1 year.

The members of the Committee may not attribute the functions of representation recognized to it, unless expressly given by agreement validly adopted, for each specific case, by the Committee.

2. The President

The President of the CAIVDC will be the responsible of Coordination of the Degree in Veterinary.

3. The president of the CAIVDC will:

- a. Exercise the representation of the Committee.
- b. Decide the meeting call of ordinary and extraordinary sessions and the agenda, considering, where appropriate, the requests of other members made sufficiently in advance.
- c. Preside over the sessions, to moderate the debates and to suspend them for justified reasons.
- d. Resolve with his vote the ties, in order to adopt agreements.
- e. Ensure compliance with the legal framework.
- f. Certify the minutes and certifications of the agreements of the CAIVDC.
- g. Invite those who can report on specific topics to attend meetings of the Committee. In no case shall the persons invited have the right to vote.
- h. Exercise as many other functions is inherent to his status as President of the Committee for Assessment and Improvement of the Veterinary Degree Curriculum.
- i. Exercise the rights that correspond to him as a member of the CAIVDC.

The Committee for Assessment and Improvement of the Veterinary Degree Curriculum may appoint from among its members a Vice-President. In the event of a vacancy, absence, sickness or other legal cause, the President shall be replaced by the Vice-President, and in his absence, by the member of the Committee of higher category, seniority and age, in this order, among its members.

3. External Agents

The External Agents will participate in the meetings of the CAIVDC, and especially in those related to decision-making, review and proposals for the improvement of the Degrees.

Rights of the members of the CAIVDC

The members of the Committee for Assessment and Improvement of the Veterinary Degree Curriculum shall have the right to:

- a) Receive, with a minimum of 48 hours in the event of ordinary sessions and 24 hours in the extraordinary sessions, the call of meetings and the agenda of the same.
- b) Have at their disposal, in the same period, all the documentation containing the necessary information for the treatment of the matters that appear in the agenda.

- c) Participate in the debates of the sessions.
- d) Exercise their right to vote and to formulate their particular vote, as well as to express the meaning of their vote and the reasons that justify it. The exercise of the vote is personal and non-transferable.
- e) Formulate requests and questions.
- f) Obtain the necessary information to fulfil the assigned functions.
- g) Other functions inherent to their condition.

Responsibilities of the members of the CAIVDC

The responsibilities of the members of the CAIVDC are:

- a) To attend the sessions of the Committee for Assessment and Improvement of the Veterinary Degree Curriculum, as well as to contribute to its normal operation, participating in as many activities as are precise.
- b) To submit to the Committee for Assessment and Improvement of the Veterinary Degree Curriculum the issues that affects it.
- c) To keep secrecy in cases where the nature of the information so requires.
- d) To refrain from intervening in the decisions of the Committee when incurring in any of the cases provided for in the legislation of the legal regime of public administrations.

OPERATION OF THE CAIVDC

Meetings

- 1. The CAIVDC will meet in ordinary and extraordinary sessions.
- 2. In ordinary sessions, it shall meet at least three times in each academic year, coinciding with the beginning, middle and end of course, approximately.
- 3. The Committee shall meet in extraordinary sessions at the initiative of the President or at the request of a minimum of 20% of the total membership. These meetings shall be convened at least twenty-four hours in advance and shall contain the agenda of the meeting.
- 4. For reasons of urgency, the President may, with the agreement of the Committee for Assessment and Improvement of the Veterinary Degree Curriculum, be able to call a new meeting orally during a meeting, sending urgent notification to the non-attending members.

Call and Agenda.

- 1. The members of the Committee for Assessment and Improvement of the Veterinary Degree Curriculum must receive the call, with the agenda, at least 48 hours in advance, except in the case of extraordinary sessions that will be 24 hours.
- 2. The call, together with the agenda and the corresponding documentation, will be made by any means that allows make a record of receipt. Whenever available means permit, the call and the remaining documents will be sent by electronic means, being the originals deposited in the respective secretariat at the disposal of the members.
- 3. The agenda shall be set by the President and shall necessarily include those points that have been requested by 20% of the members of the Committee. No matter not included in the Agenda shall be subject to deliberation, voting or agreement, unless all the members of the Committee are present and the urgency is declared by the favourable vote of the majority of the members.
- 4. The Agenda may specify which matters may be approved, if there is no opposition, without the need for deliberation.

Electronic communications.

- 1. Communications to the members of the CAIVDC will be practiced using the telematic means that the University makes available to the university community. The member of the Committee who does not have the means or does not want to receive the documentation by telematic means will communicate it to the Secretary of the Committee. For that purpose, once their designation has been made, the members of the Committee for Assessment and Improvement of the Veterinary Degree Curriculum shall provide the Secretary with an e-mail address, to which

communications shall be addressed. The members of the Committee shall communicate to the Secretary any changes in the e-mail address that may occur.

2. The telematic communication to the members of the CAIVDC will only be valid if there is evidence of reception, dates and the full content of the communications, and the sender and the recipient are reliably identified.

3. The communication shall be understood to be performed for all legal purposes at the time of access to its contents in the electronic address provided. When there is a record of receipt of the notification in the electronic address, four calendar day's elapse, for the convocations of ordinary sessions and twenty-four hours, for the convocations of extraordinary sessions, without access to its content, it will be understood that the notification has been rejected, unless the technical or material impossibility of access is established.

Development of sessions

1. The CAIVDC will be validly constituted for the purpose of holding sessions, deliberations and making agreements, at first call when at least half of its members and the President are present, and at second call, half an hour later, when at least one-third of its members and the President are present.

2. Participation in deliberations and voting is personal and non-delegable.

3. No one shall be interrupted while speaking, except by the President.

4. In order to proceed to the discussion, the President shall open a series of speeches. In view of the requests, the President may determine the time limitations of their use.

5. The closure of the discussion may be agreed upon by the President, upon prior notice, once those who have requested the floor or have renounced.

6. Once the discussion has been closed, the President will present the proposal or proposals that are the subject of a vote.

7. The members of the CAIVDC may be called to order when they interrupt or otherwise alter the order of the sessions or when they intend to continue speaking after they have been withdrawn.

After having been warned three times at the same Session, the President may impose a ban on attending the rest of the session.

Order issues.

1. Order issues shall be considered, inter alia, the proposed postponement of the debate, the limitations on the interventions, the proposal for suspension or the proposal for a vote.

2. Points of order shall be decided, if necessary, by a show of hands.

Agreements.

1. The agreements shall be adopted by simple majority, by assent or by public vote by show of hands, at the proposal of its President. In case of a tie the president has a casting vote. In any case, the proposed modification of the Operating Regulations of the Committee for Assessment and Improvement of the Veterinary Degree Curriculum will require its approval by an absolute majority.

2. Exceptionally, agreements may be adopted by secret ballot at the request of one of its members. The voting related to people will always be secret. Once a proposal has been made by the President, it will be considered approved by assent, if no member requests the vote or presents objection or opposition to it.

3. Upon the announcement of the beginning of a vote by the President, no member may interrupt it except to raise a point of order relating to the way the voting is being conducted.

4. No matter that is not expressly included in the Agenda can be voted, unless all the members of the Committee are present, it is proposed at the beginning of the session, and the urgency of the matter is declared by the favourable vote of the Committee by majority.

Minutes.

1. Minutes of each meeting held by the Committee for Assessment and Improvement of the Veterinary Degree Curriculum shall be recorded by the President, who shall necessarily specify the attendees, the agenda of the meeting, the circumstances of the place and the time at which it was held, the Points of the deliberations, as well as the content of the agreements adopted.
2. The minutes shall contain the agreement or agreements adopted. Likewise, at the request of the respective members of the Committee for Assessment and Improvement of the Veterinary Degree Curriculum, a vote contrary to the agreement, their abstention and the reasons justifying it or the sense of their favourable vote shall be included. Any member has the right to request the full transcription of his intervention or proposal, provided that he or she furnishes, at the time, or within the term indicated by the President, the text that corresponds faithfully to his intervention, thus recording in the minutes or joining a copy to the same.
3. Members who disagree with the majority agreement may formulate a private vote in writing within forty-eight hours, which shall be incorporated into the approved text. Individual votes shall be limited to explaining the reasons for the discrepancy.
4. When the members of the Committee for Assessment and Improvement of the Veterinary Degree Curriculum vote against or abstain, they will be exempt from any responsibility that may arise from the agreements, if any.
5. The minutes shall be approved at the same or at the next session, although the President may nevertheless issue certification on the specific agreements that have been adopted, without prejudice to the subsequent approval of the minutes. In the certifications of agreements issued prior to the approval of the minutes, this circumstance shall be expressly stated.
6. The Minutes shall be signed on the last page and in the margin of each of the others, by the President and shall be endorsed by the President. The sheets should be numbered sequentially, starting with number 1. The minutes will be filed in the secretariat of the Committee under the responsibility of the Secretary.
7. The President shall send a copy of the minutes of each session to all members of the Committee for Assessment and Improvement of the Veterinary Degree Curriculum as soon as possible, and in any case, together with the convening of the next session of the Committee at which it is to be approved.
8. The minutes of one session shall be approved at the beginning of the next session.
9. Any member of the Committee who does not agree with the content of the Minutes may request in writing any modifications that may be considered. The President may not estimate the correctness of the amendments, in which case may reasonably reject the amendments that arise.

Agreement effects.

1. The agreements and decisions adopted by the Committee for Assessment and Improvement of the Veterinary Degree Curriculum will have the appropriate effects according to their content and that established in current regulations.
2. The agreements and decisions adopted by the Committee for Assessment and Improvement of the Veterinary Degree Curriculum will be communicated to the interested parties to make the necessary changes and improvements. They will also be submitted to the Faculty Council for its knowledge and, if necessary, for ratification.

ACTING COMMITTEE FOR ASSESSMENT AND IMPROVEMENT OF THE VETERINARY DEGREE CURRICULUM

Acting Intervention

The members of the CAIVDC, once their term has expired, will remain acting until the election of the new members and will limit their management to the adoption of agreements on procedural matters, refraining from adopting, unless duly accredited cases of urgency or reasons of general interest for the Degrees, whose accreditation expressly justifies it.

**MODIFICATION OF THE OPERATING REGULATIONS OF THE COMMITTEE FOR
ASSESSMENT AND IMPROVEMENT OF THE VETERINARY DEGREE
CURRICULUM**

Modification of the Operating Regulations

The proposal to modify these operating regulations will require the favourable votes of most of the members of the CAIVDC. Once approved, the proposal will be submitted to the Faculty Council for approval.

APPENDIX 4.5.

Student Satisfaction Survey with admission and acceptance processes.

This survey aims to be a first approximation to the general opinion of the students regarding the Degree that will be completed with other actions that allow a global analysis.



SATISFACTION OF STUDENTS WITH ADMISSION
AND ACCEPTANCE PROCESSES

INTERNAL QUALITY ASSURANCE SYSTEM

FACULTY: _____ YEAR _____

DEGREE: _____

The aim of this questionnaire is to compile information on general satisfaction with admission and acceptance processes. Information will be drawn from the data obtained and will be used by the Quality Assurance Committee to analyse and improve the degree programme. Given the relevance of the information requested, it is of utmost importance that you answer in a sincere and responsible fashion.

Please assess the following aspects according to the following **satisfaction level scale**:
(1) Very poor / I strongly disagree
(5) Very well / I strongly agree

Gender : Male Female



SELECTION, ADMISSION AND ENROLMENT	1	2	3	4	5
1. The previous information (preregistration, admission, enrolment process...) on the Degree offered by the University of Murcia.					
2. Satisfaction with selection and admission processes at the University of Murcia.					
3. Service and assistance at the Faculty Office.					
4. Information provided by the Faculty Office.					
5. In general, I am satisfied with the enrolment process.					
STUDENT GUIDANCE	1	2	3	4	5
6. The applicants' profile (skills and competences to adequately face new studies) is clear and public.					
7. Information provided on the syllabus: subject programmes, competences, methodology, assessment criteria, teaching staff in charge, etc.					
8. Usefulness of activities for academic guidance (Welcoming Day, Induction Course, information on the different University and Faculty services, etc.)					
9. The activities for academic guidance are interesting and favour integration within the University.					
10. In general, I am satisfied with guidance activities for students.					

Please indicate three positive and three negative aspects relating to these topics. Your suggestions for the improvement of these topics are welcomed (you can use the back of the form to this end)

POSITIVE ASPECTS	NEGATIVE ASPECTS
1	1
2	2
3	3

APPENDIX 4.6.
Student Satisfaction Survey with the degree.

This survey aims to be a first approximation to the general opinion of the students regarding the Degree that will be completed with other actions that allow a global analysis.

 UNIVERSIDAD DE MURCIA		STUDENT SATISFACTION WITH THE DEGREE
QUALITY ASSURANCE SYSTEM FACULTY: _____ YEAR: _____ DEGREE: _____		
<i>The aim of this questionnaire is to compile information on general satisfaction with the Degree. Information will be drawn from the data obtained and will be used by the Quality Assurance Committee to analyse and improve the Degree. Given the relevance of the information requested, it is of utmost importance that you answer in a sincere and responsible fashion. Answers will be treated anonymously.</i>		
01.- Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female	02.- You attend your classes on a regular basis: <input type="checkbox"/> Yes <input type="checkbox"/> No	03.- You have chosen this degree as a first option: <input type="checkbox"/> Yes <input type="checkbox"/> No

Please assess the following aspects according to the following satisfaction level scale:

from (1) Very poor/ Very dissatisfied to (5) Very well / Very satisfied

If there are any questions you cannot or do not wish to answer, please leave them blank

1	Information on the Syllabus published on the website of the Degree	1	2	3	4	5
2	Easy access to information on timetables, classrooms, exam dates, etc.	1	2	3	4	5
3	Usefulness of information included in Teaching Guides	1	2	3	4	5
4	Coordination among modules, in order to prevent gaps and overlaps	1	2	3	4	5
5	Coordination between theoretical and practical training within the different modules	1	2	3	4	5
6	Acquisition of knowledge and development of skills and attitudes (competences) proposed on the Teaching Guides	1	2	3	4	5
7	Teaching methodologies used in the different subjects of the Degree	1	2	3	4	5
8	Evaluation systems used in the different subjects of the Degree	1	2	3	4	5
9	Working area and atmosphere in the classrooms (equipment, lighting, air conditioning, acoustics, etc.)	1	2	3	4	5
10	Working area and atmosphere in the study rooms, IT rooms, labs, etc. (equipment, lighting, air conditioning, acoustics, etc.)	1	2	3	4	5
11	Adaptation of the classrooms, and the rest of working areas, to the number of students and the activities programmed in them	1	2	3	4	5
12	The different sources of information the Faculty has (databases, Aula Virtual, library resources, etc.)	1	2	3	4	5
13	Assistance provided at the Faculty Office	1	2	3	4	5
14	Activities related to the assistance and guidance provided to students (welcoming programmes, professional guidance, learning support, etc.)	1	2	3	4	5

APPENDIX 4.7.
Teaching Staff Satisfaction Survey with the degree.



**SURVEY ON TEACHING STAFF SATISFACTION
WITH THE DEGREE**

QUALITY ASSURANCE SYSTEM

FACULTY: _____ YEAR: _____

DEGREE: _____

The aim of this questionnaire is to compile information on general satisfaction with the Degree. Information will be drawn from the data obtained and will be used by the Quality Assurance Committee to analyse and improve the Degree. Given the relevance of the information requested, it is of utmost importance that you answer in a sincere and responsible fashion.

Gender: Male
 Female

Years of teaching: Less than 1 year
From 1 to 5 years
From 6 to 15 years
More than 15 years

Please assess the following aspects according to the following satisfaction level scale:
From (1) Very poor/ Very dissatisfied to (5) Very well / Very satisfied

		1	2	3	4	5
1	Planning and development of teaching activities					
2	Teaching coordination in order to ensure the achievement of learning results.					
3	Interdepartmental coordination for teaching programmes to prevent gaps and overlaps					
4	Intradepartmental coordination for teaching programmes to prevent gaps and overlaps					
5	Coordination between theoretical and practical activities					
6	Time adaptation of the student's workload					
7	Information published on the website of the Degree, both in terms of content and accessibility					
8	Teaching improvement and updating activities offered by the Faculty or Professional Training and Development Centre					
9	Teaching innovation and updating activities in which you have taken part					
10	Working area and atmosphere in the classrooms (equipment, lighting, air conditioning, acoustics, etc.)					
11	Working area and atmosphere in the study rooms, IT rooms, labs, etc. (equipment, lighting, air conditioning, acoustics, etc.)					
12	Adaptation of the classrooms, and the rest of working areas, to the number of students and the activities programmed in them					
13	The different sources of information the Faculty has (databases, library resources, Aula Virtual, etc.)					
14	Undertaking a practicum (when included in the Degree) in order for the student to acquire professional or applied competences					
15	Learning results (competences) achieved by students, compared to expected results					
16	Activities related to the assistance and guidance provided to students (welcoming programmes, guidance, learning support, etc.)					

Survey on teaching staff satisfaction with the Degree V14



**SURVEY ON TEACHING STAFF SATISFACTION
WITH THE DEGREE**

17	Students' use of tutoring sessions	1	2	3	4	5
18	Your knowledge of the Quality Assurance System of the Faculty (SGIC)	1	2	3	4	5
19	The number of auxiliary teaching staff (labs, libraries...) is sufficient for the tasks to be carried out.	1	2	3	4	5
20	Training of auxiliary teaching staff (labs, libraries...)	1	2	3	4	5
21	(Only for Master's Degree and PhD) And in the event there are any: Complementary training to meet its competence and knowledge levelling role to facilitate learning in the Degree	1	2	3	4	5
22	General satisfaction level with the syllabus	1	2	3	4	5
23	General satisfaction level with available material resources	1	2	3	4	5
24	General satisfaction level with the Degree	1	2	3	4	5

Finally, if you have any comments or suggestions not reflected in this questionnaire, please include them below.

APPENDIX 4.8.
Graduate Satisfaction Survey with the degree.



**GRADUATE SATISFACTION
WITH THE DEGREE**

QUALITY ASSURANCE SYSTEM

FACULTY: _____ YEAR _____

DEGREE: _____

The aim of this questionnaire is to compile information on general satisfaction with the Degree. Information will be drawn from the data obtained and will be used by the Quality Assurance Committee to analyse and improve the Degree. Given the relevance of the information requested, it is of utmost importance that you answer in a sincere and responsible fashion.

00.- Gender: Male
 Female

Please **assess** the following aspects according to the following **satisfaction level** scale:

From (1) Very poor/ Very dissatisfied to (5) Very well / Very satisfied

If there are questions you cannot or do not wish to answer, please leave them blank

1	Organisation of subjects within the syllabus to achieve the degree profile	1	2	3	4	5
2	Information published on the website of the Degree	1	2	3	4	5
3	External work placement subjects undertaken	1	2	3	4	5
4	Teaching methodologies used in the Degree	1	2	3	4	5
5	Training activities used in the Degree	1	2	3	4	5
6	Evaluation systems used in the Degree	1	2	3	4	5
7	Acquisition of knowledge and development of skills and attitudes (competences) proposed on the Teaching Guides	1	2	3	4	5
8	General satisfaction level with the Degree	1	2	3	4	5

Finally, if you have any comments or suggestions not reflected in this questionnaire, please include them below.

APPENDIX 4.9.
External Stakeholders Satisfaction Survey with the degree.



EMPLOYER SATISFACTION
WITH THE DEGREE

QUALITY ASSURANCE SYSTEM

FACULTY: _____ YEAR _____

DEGREE: _____

The aim of this questionnaire is to compile information on general satisfaction with the Degree. Information will be drawn from the data obtained and will be used by the Quality Assurance Committee to analyse and improve the Degree. Given the relevance of the information requested, it is of utmost importance that you answer in a sincere and responsible fashion.

00.- Gender: Male
 Female

Please **assess** the following aspects according to the following **satisfaction level** scale:

From (1) Very poor/ Very dissatisfied to (5) Very well / Very satisfied

Questions that do not know or do not want to answer please leave them blank

For ALL employers:

1	Information published on the website of the Degree, if you have checked it	1	2	3	4	5
2	Communication between University and your Institution/Company	1	2	3	4	5

For employers who have or have had students undertaking their WORK PLACEMENT at their institution:

3	Development of external work placement agreement	1	2	3	4	5
4	Activities carried out by undergraduate students in your Institution/Company.	1	2	3	4	5
5	Knowledge and skills acquired by the student in the Degree, with regards to the functions to be carried out at your Institution/Company	1	2	3	4	5
6	Assessment system for the work placement programme	1	2	3	4	5
7	Coordination between the tutor in your Institution/Company and the tutor at the University for the work placement programme	1	2	3	4	5

For employers who hire or have hired GRADUATES:

8	On the training and competences of graduates hired by your Institution/Company	1	2	3	4	5
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Finally, if you have any comments or suggestions not reflected in this questionnaire, please include them below.

Survey on employer satisfaction with the Degree V14

APPENDIX 5

Animal resources and teaching material of animal origin

APPENDIX 5.1. Cadavers and material of animal origin used in practical anatomical training.

2022-23	2021-22	2020-21
<i>Equine</i>	<i>Equine</i>	<i>Equine</i>
2 skeletons	2 skeletons	2 skeletons
28 Skulls & mandibles	26 Skulls & mandibles	25 Skulls & mandibles
5 collections of vertebrae, ribs & 3 sternums	5 collections of vertebrae, ribs & 3 sternums	5 collections of vertebrae, ribs & 3 sternums
7 sets of forelimb bones & 7 sets of hindlimb bones	7 sets of forelimb bones & 7 sets of hindlimb bones	7 sets of forelimb bones & 7 sets of hindlimb bones
32 joints (spine, forelimb & hindlimb)	23 joints (spine, forelimb & hindlimb)	21 joints (spine, forelimb & hindlimb)
19-digit prosections (wet & plastinated)	14-digit prosections (wet & plastinated)	14-digit prosections (wet & plastinated)
17 head prosections (wet & plastinated)	15 head prosections (wet & plastinated)	14 head prosections (wet & plastinated)
5 forelimb & 5 hindlimb prosections (wet & plastinated)	4 forelimb & 4 hindlimb prosections (wet & plastinated)	3 forelimb & 3 hindlimb prosections (wet & plastinated)
55 manus or foot for fresh dissection	55 manus or foot for fresh dissection	55 manus or foot for fresh dissection
12 hoof & digit corion	12 hoof & digit corion	12 hoof & digit corion
20 hearts (13 wet, 7 plastinated)	19 hearts (13 wet, 6 plastinated)	6 hearts (4 wet, 2 plastinated)
6 lungs (4 wet, 2 plastinated)	6 lungs (4 wet, 2 plastinated)	6 lungs (4 wet, 2 plastinated)
4 livers (3 wet, 1 plastinated)	4 livers (3 wet, 1 plastinated)	4 livers (3 wet, 1 plastinated)
9 stomachs (5 wet, 4 plastinated)	9 stomachs (5 wet, 4 plastinated)	9 stomachs (5 wet, 4 plastinated)
16 kidneys (10 wet, 6 plastinated)	16 kidneys (10 wet, 6 plastinated)	16 kidneys (10 wet, 6 plastinated)
5 spleens (5 wet)	5 spleens (5 wet)	5 spleens (5 wet)
13 uteri (7 wet, 6 plastinated)	13 uteri (7 wet, 6 plastinated)	13 uteri (7 wet, 6 plastinated)
12 penises (5 wet, 2 plastinated)	7 penises (5 wet, 2 plastinated)	7 penises (5 wet, 2 plastinated)
23 brains (13 wet, 6 plastinated)	19 brains (13 wet, 6 plastinated)	19 brains (13 wet, 6 plastinated)

<i>Companion animals</i>	<i>Companion animals</i>	<i>Companion animals</i>
5 live dogs	5 live dogs	5 live dogs
5 complete skeletons (dogs & cats)	5 complete skeletons (dogs & cats)	5 complete skeletons (dogs & cats)
15 skulls & mandible	15 skulls & mandible	15 skulls & mandible
7 collections of vertebrae, ribs & 3 sternums	7 collections of vertebrae, ribs & 3 sternums	7 collections of vertebrae, ribs & 3 sternums
7 sets of forelimb & 7 sets of hindlimb bones	7 sets of forelimb & 7 sets of hindlimb bones	7 sets of forelimb & 7 sets of hindlimb bones
12 joints (spine, forelimb & hindlimb)	12 joints (spine, forelimb & hindlimb)	12 joints (spine, forelimb & hindlimb)
12 dogs & 2 cats with locomotor prosection (wet & plastinated)	8 dogs & 2 cats with locomotor prosection (wet & plastinated)	8 dogs & 2 cats with locomotor prosection (wet & plastinated)
22 forelimb & 21 hindlimb prosections (wet & plastinated)	18 forelimb & 20 hindlimb prosections (wet & plastinated)	15 forelimb & 18 hindlimb prosections (wet & plastinated)
12 collections of dog head cavities dissections (wet and plastinated)	12 collections of dog head cavities dissections (wet and plastinated)	12 collections of dog head cavities dissections (wet and plastinated)
6 complete plastinated dogs with dissections of body cavities	6 complete plastinated dogs with dissections of body cavities	6 complete plastinated dogs with dissections of body cavities
1 complete vascular injected plastinated dog, horizontally sectioned	1 complete vascular injected plastinated dog, horizontally sectioned	1 complete vascular injected plastinated dog, horizontally sectioned
26 dog thoracic cavities (18 wet, 8 plastinated)	26 dog thoracic cavities (18 wet, 8 plastinated)	26 dog thoracic cavities (18 wet, 8 plastinated)
12 dog hearts (8 wet, 4 plastinated)	12 dog hearts (8 wet, 4 plastinated)	12 dog hearts (8 wet, 4 plastinated)
2 sets of dogs echocardiographic plastinated heart	2 sets of dogs echocardiographic plastinated heart	2 sets of dogs echocardiographic plastinated heart
23 dog abdominal and pelvic cavities (17 wet, 6 plastinated)	23 dog abdominal and pelvic cavities (17 wet, 6 plastinated)	23 dog abdominal and pelvic cavities (17 wet, 6 plastinated)
13 lungs (5 wet, 8 plastinated)	13 lungs (5 wet, 8 plastinated)	13 lungs (5 wet, 8 plastinated)
10 livers (8 wet, 2 plastinated)	10 livers (8 wet, 2 plastinated)	10 livers (8 wet, 2 plastinated)
13 stomachs (6 wet, 7 plastinated)	13 stomachs (6 wet, 7 plastinated)	13 stomachs (6 wet, 7 plastinated)
12 kidneys (8 wet, 4 plastinated)	12 kidneys (8 wet, 4 plastinated)	12 kidneys (8 wet, 4 plastinated)
7 spleens (2 wet, 5 plastinated)	7 spleens (2 wet, 5 plastinated)	7 spleens (2 wet, 5 plastinated)

6 uteri (1 wet, 5 plastinated) 20 brains (15 wet, 5 plastinated) 15 fetuses of different ages with placenta (11 wet, 4 plastinated)	6 uteri (1 wet, 5 plastinated) 20 brains (15 wet, 5 plastinated) 15 fetuses of different ages with placenta (11 wet, 4 plastinated)	6 uteri (1 wet, 5 plastinated) 20 brains (15 wet, 5 plastinated) 15 fetuses of different ages with placenta (11 wet, 4 plastinated)
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<i>Cattle</i>	<i>Cattle</i>	<i>Cattle</i>
1 complete skeleton	1 complete skeleton	1 complete skeleton
15 skulls & mandible	15 skulls & mandible	15 skulls & mandible
4 collections of vertebrae, ribs and 3 sternums	4 collections of vertebrae, ribs and 3 sternums	4 collections of vertebrae, ribs & 3 sternums
4 sets of forelimbs & 6 sets of hindlimb bones	4 sets of forelimbs & 6 sets of hindlimb bones	4 sets of forelimbs & 6 sets of hindlimb bones
12 joints (spine, forelimb & hindlimb) (wet & plastinated)	6 joints (spine, forelimb & hindlimb) (wet & plastinated)	5 joints (spine, forelimb & hindlimb) (wet & plastinated)
4 spine & limb prosections	2 spine & limb prosections	2 spine & limb prosections
1 cow head cavities prosection 7 hearts (5 wet, 2 plastinated) 3 livers (3 wet)	1 cow head cavities prosection 7 hearts (5 wet, 2 plastinated) 3 livers (3 wet)	1 cow head cavities prosection 7 hearts (5 wet, 2 plastinated) 3 livers (3 wet)
1 stomach (1 plastinated)	1 stomach (1 plastinated)	1 stomach (1 plastinated)
9 kidneys (6 wet, 3 plastinated) 5 spleens (5 wet)	9 kidneys (6 wet, 3 plastinated) 5 spleens (5 wet)	9 kidneys (6 wet, 3 plastinated) 5 spleens (5 wet)
15 uteri (10 wet, 5 plastinated) 7 brains (5 wet, 2 plastinated)	15 uteri (10 wet, 5 plastinated) 7 brains (5 wet, 2 plastinated)	15 uteri (10 wet, 5 plastinated) 7 brains (5 wet, 2 plastinated)
18 fetuses of different ages with placenta (9 wet, 9 plastinated)	18 fetuses of different ages with placenta (9 wet, 9 plastinated)	18 fetuses of different ages with placenta (9 wet, 9 plastinated)

<i>Small Ruminants</i>	<i>Small Ruminants</i>	<i>Small Ruminants</i>
3 complete skeletons	3 complete skeletons	3 complete skeletons
10 skulls & mandibles	10 skulls & mandibles	10 skulls & mandibles
2 collections of isolated bones	2 collections of isolated bones	2 collections of isolated bones

8 joints (forelimb & hindlimb) 5 Forelimb & hindlimb prosections (wet & plastinated)	8 joints (forelimb & hindlimb) 5 hindlimb prosections (wet & plastinated)	8 joints (forelimb & hindlimb) 2 hindlimb prosections (wet & plastinated)
6 hearts (4 wet, 2 plastinated)	6 hearts (4 wet, 2 plastinated)	6 hearts (4 wet, 2 plastinated)
15 brains (10 wet, 5 plastinated)	15 brains (10 wet, 5 plastinated)	15 brains (10 wet, 5 plastinated)
5 lungs (2 wet, 3 plastinated)	5 lungs (2 wet, 3 plastinated)	5 lungs (2 wet, 3 plastinated)
4 livers (wet)	4 livers (wet)	4 livers (wet)
7 stomachs (3 wet, 4 plastinated)	7 stomachs (3 wet, 4 plastinated)	7 stomachs (3 wet, 4 plastinated)
8 kidneys (6 wet, 2 plastinated)	8 kidneys (6 wet, 2 plastinated)	8 kidneys (6 wet, 2 plastinated)
6 spleens (wet)	6 spleens (wet)	6 spleens (wet)
8 uteri (3 wet, 5 plastinated)	8 uteri (3 wet, 5 plastinated)	8 uteri (3 wet, 5 plastinated)
17 brains (12 wet, 5 plastinated)	17 brains (12 wet, 5 plastinated)	17 brains (12 wet, 5 plastinated)
14 fetuses of different ages with placenta (9 wet, 5 plastinated)	14 fetuses of different ages with placenta (9 wet, 5 plastinated)	14 fetuses of different ages with placenta (9 wet, 5 plastinated)

<i>Pigs</i>	<i>Pigs</i>	<i>Pigs</i>
1 complete Skeleton	1 complete Skeleton	1 complete Skeleton
5 skulls	5 skulls	5 skulls
3 collections of isolated bones	3 collections of isolated bones	3 collections of isolated bones
5 joint collections (wet and plastinated)	5 joint collections (wet and plastinated)	5 joint collections (wet and plastinated)
28 hearts (11 wet, 17 plastinated)	28 hearts (11 wet, 17 plastinated)	28 hearts (11 wet, 17 plastinated)
6 lungs (3 wet, 3 plastinated)	6 lungs (3 wet, 3 plastinated)	6 lungs (3 wet, 3 plastinated)
4 livers (wet)	4 livers (wet)	4 livers (wet)
11 stomachs (6 wet, 5 plastinated)	11 stomachs (6 wet, 5 plastinated)	11 stomachs (6 wet, 5 plastinated)
11 kidneys (6 wet, 5 plastinated)	11 kidneys (6 wet, 5 plastinated)	11 kidneys (6 wet, 5 plastinated)
5 spleens (wet)	5 spleens (wet)	5 spleens (wet)
23 uteri (17 wet, 6 plastinated)	23 uteri (17 wet, 6 plastinated)	23 uteri (17 wet, 6 plastinated)

15 brains (10 wet, 5 plastinated)	15 brains (10 wet, 5 plastinated)	15 brains (10 wet, 5 plastinated)
35 fetuses of different ages with placenta (12 wet, 23 plastinated)	35 fetuses of different ages with placenta (12 wet, 23 plastinated)	35 fetuses of different ages with placenta (12 wet, 23 plastinated)
90 testicles (wet)	90 testicles (wet)	90 testicles (wet)
300 ovaries (wet)	300 ovaries (wet)	300 ovaries (wet)

<i>Poultry and Rabbits</i>	<i>Poultry and Rabbits</i>	<i>Poultry and Rabbits</i>
5 complete skeletons	5 complete skeletons	5 complete skeletons
6 skulls	6 skulls	5 skulls
50 poultry fresh complete cadavers	50 poultry fresh complete cadavers	50 poultry fresh complete cadavers

<i>Dolphins/Exotic pets</i>	<i>Dolphins/Exotic pets</i>	<i>Dolphins/Exotic pets</i>
45 collections of isolated dolphin bones	45 collections of isolated dolphin bones	45 collections of isolated dolphin bones
1 complete dolphin skeleton	1 complete dolphin skeletons	1 complete dolphin skeletons
5 dolphin skulls	6 dolphin skulls	6 dolphin skulls
11 dolphin head prosections	7 dolphin head prosections	6 dolphin head prosections
17 dolphin fetuses	17 dolphin fetuses	17 dolphin fetuses
3 adults & 6 newborn dolphin frozen cadavers	3 adults & 6 newborn dolphin frozen cadavers	3 adults & 6 newborn dolphin frozen cadavers
2 South American beaver	2 South American beaver	2 South American beaver

APPENDIX 5.2.

Organs and pathological specimens collected from local abattoirs used in practical anatomopathological training.

<i>2022-23</i>	<i>2021-22</i>	<i>2020-21</i>
<i>Equine</i>	<i>Equine</i>	<i>Equine</i>
2 lungs	2 lungs	1 lung
2 livers	1 liver	1 liver
1 kidney	1 kidney	--
1 heart	1 heart	--
1 spleen	--	--
1 digestive system	--	--
1 skin	1 skin	1 skin
1 head	--	--
<i>Cattle</i>	<i>Cattle</i>	<i>Cattle</i>
30 lungs	25 lungs	25 lungs
30 livers	30 livers	25 livers
25 kidneys	25 kidneys	24 kidneys
4 hearts	4 hearts	3 hearts
2 spleens	2 spleens	2 spleens
3 digestive systems	3 digestive systems	3 digestive systems
1 skin	1 skin	1 skin
1 head	1 head	--
1 extremity	--	--
<i>Small Ruminants</i>	<i>Small Ruminants</i>	<i>Small Ruminants</i>
69 lungs	68 lungs	68 lungs
75 livers	75 livers	75 livers
45 kidneys	45 kidneys	45 kidneys
12 hearts	12 hearts	12 hearts
5 spleens	5 spleens	5 spleens
5 digestive systems	5 digestive systems	4 digestive systems
3 skins	3 skins	3 skins
3 heads	3 heads	3 heads
2 extremities	2 extremities	1 extremity

<i>Pigs</i>	<i>Pigs</i>	<i>Pigs</i>
39 lungs	38 lungs	38 lungs
10 livers	10 livers	10 livers
7 kidneys	7 kidneys	6 kidneys
15 hearts	14 hearts	14 hearts
4 spleens	3 spleens	3 spleens
4 digestive systems	4 digestive systems	4 digestive systems
4 skins	3 skins	3 skins
1 head	1 head	--
2 extremities	2 extremities	1 extremity

APPENDIX 6

List of scientific publications from the Establishment's academic staff in peer reviewed journals during the last three academic years.

1. Mateo-Otero Y, Fernández-López P, Gil-Caballero S, Fernandez-Fuertes B, Bonet S, Barranco I, et al. 1H nuclear magnetic resonance of pig seminal plasma reveals intra-ejaculate variation in metabolites. *Biomolecules*. 2020;10(6):1-16.
2. VasIU I, Dabrowski R, Todescu L, Mocanu EM, Bochniarz M, Szczubial M, et al. A case of mastitis in an allomother mongrel bitch nursing a jaguar cub. *Medycyna Weterynaryjna*. 2022;78(5):249-52.
3. Meléndez-Martínez AJ, Mandić AI, Bantis F, Böhm V, Borge GIA, Brnčić M, et al. A comprehensive review on carotenoids in foods and feeds: status quo, applications, patents, and research needs. *Critical Reviews in Food Science and Nutrition*. 2022;62(8):1999-2049.
4. López-Berenguer G, Peñalver J, Martínez-López E. A critical review about neurotoxic effects in marine mammals of mercury and other trace elements. *Chemosphere* [Internet]. 2020;246
5. de la Fuente J, Urrea JM, Contreras M, Pacheco I, Ferreras-Colino E, Doncel-Pérez E, et al. A dataset for the analysis of antibody response to glycan alpha-Gal in individuals with immune-mediated disorders. *F1000Research* [Internet]. 2021;9.
6. Hernandis V, Escudero E, Pareja A, Marín P. A fast, cost-saving and sensitive method for determination of cefuroxime in plasma by HPLC with ultraviolet detection. *Biomedical Chromatography* [Internet]. 2021;35(10).
7. Roque I, Lourenço R, Marques A, Martínez-López E, Espín S, Gómez-Ramírez P, et al. A First Record of Organochlorine Pesticides in Barn Owls (*Tyto alba*) from Portugal: Assessing Trends from Variation in Feather and Liver Concentrations. *Bulletin of Environmental Contamination and Toxicology*. 2022;109(3):436-42.
8. Llamas-López PJ, López-Úbeda R, López G, Antinoya E, García-Vázquez FA. A new device for deep cervical artificial insemination in gilts reduces the number of sperm per dose without impairing final reproductive performance. *Journal of Animal Science and Biotechnology* [Internet]. 2019;10(1).
9. Hernandis V, Escudero E, Marín P. A novel liquid chromatography-fluorescence method for the determination of delafloxacin in human plasma. *Journal of Separation Science*. 2022;45(3):706-16.
10. López-Martínez MJ, Cerón JJ, Ortín-bustillo A, Escribano D, Kuleš J, Beletić A, et al. A Proteomic Approach to Elucidate the Changes in Saliva and Serum Proteins of Pigs with Septic and Non-Septic Inflammation. *International Journal of Molecular Sciences* [Internet]. 2022;23(12).
11. Dulsat-Masvidal M, Lourenço R, Lacorte S, D'Amico M, Albayrak T, Andevski J, et al. A review of constraints and solutions for collecting raptor samples and contextual data for a European Raptor Biomonitoring Facility. *Science of the Total Environment* [Internet]. 2021;793.
12. Espín S, Andevski J, Duke G, Eulaers I, Gómez-Ramírez P, Hallgrímsson GT, et al. A schematic sampling protocol for contaminant monitoring in raptors. *Ambio*. 2021;50(1):95-100.
13. Gonzalez-Ramiro H, Cuello C, Cambra JM, Gonzalez-Plaza A, Vazquez JM, Vazquez JL, et al. A Short-Term Altrenogest Treatment Post-weaning Followed by Superovulation Reduces Pregnancy Rates and Embryo Production Efficiency in Multiparous Sows. *Frontiers in Veterinary Science* [Internet]. 2021;8.
14. Muñoz-Prieto A, Cerón JJ, Martínez-Subiela S, Mrljak V, Tvarijonaviciute A. A systematic review and meta-analysis of serum adiponectin measurements in the framework of dog obesity. *Animals*. 2020;10(9):1-15.
15. VasIU I, Dąbrowski R, Wochnik M, Plusa A, Tvarijonaviciute A. A systematic review of mammary gland inflammations in queens (*Felis catus*). *Animal Reproduction Science* [Internet]. 2023;256.
16. Ríos A, López-Navas AI, Flores-Medina J, Martínez-Alarcón L, Ayala-García MA, Carrillo J, et al. Acceptance of Solid Organ Xenotransplantation by the Ecuadorian Population Residing in Spain. *Transplantation Proceedings*. 2020;52(2):459-61.
17. Martinez EA, Martinez CA, Cambra JM, Maside C, Lucas X, Vazquez JL, et al. Achievements and future perspectives of embryo transfer technology in pigs. *Reproduction in Domestic Animals*. 2019;54(S4):4-13.
18. Sánchez-Carvajal JM, Rodríguez-Gómez IM, Ruedas-Torres I, Larenas-Muñoz F, Díaz I, Revilla C, et al. Activation of pro- and anti-inflammatory responses in lung tissue injury during the acute phase of PRRSV-1 infection with the virulent strain Lena. *Veterinary Microbiology* [Internet]. 2020;246.
19. Ruedas-Torres I, Rodríguez-Gómez IM, Sánchez-Carvajal JM, Pallares FJ, Barranco I, Carrasco L, et al. Activation of the extrinsic apoptotic pathway in the thymus of piglets infected with PRRSV-1 strains of different virulence. *Veterinary Microbiology* [Internet]. 2020;243.
20. Llaha F, Cayssials V, Farràs M, Agudo A, Sandström M, Eriksen AK, et al. Adherence to mediterranean diet and the risk of differentiated thyroid cancer in a European cohort: The EPIC study. *Frontiers in Nutrition* [Internet]. 2022;9.
21. Belda-Perez R, Heras S, Cimini C, Romero-Aguirregomezcorta J, Valbonetti L, Colosimo A, et al. Advancing bovine in vitro fertilization through 3D printing: the effect of the 3D printed materials. *Frontiers in Bioengineering and Biotechnology* [Internet]. 2023;11
22. VasIU I, Meroni G, Dąbrowski R, Martino PA, Tvarijonaviciute A, Bochniarz M, et al. Aerobic isolates from gestational and non-

- gestational lactating bitches (*Canis lupus familiaris*). *Animals* [Internet]. 2021;11(11).
23. Afrashtehfar KI, Assery MKA, Bryant SR. Aesthetic Parameters and Patient-Perspective Assessment Tools for Maxillary Anterior Single Implants. *International Journal of Dentistry* [Internet]. 2021;2021.
24. Fernández-ortiz M, Sayed RKA, Román-montoya Y, de Lama MÁR, Fernández-martínez J, Ramírez-casas Y, et al. Age and Chronodisruption in Mouse Heart: Effect of the NLRP3 Inflammasome and Melatonin Therapy. *International Journal of Molecular Sciences* [Internet]. 2022;23(12).
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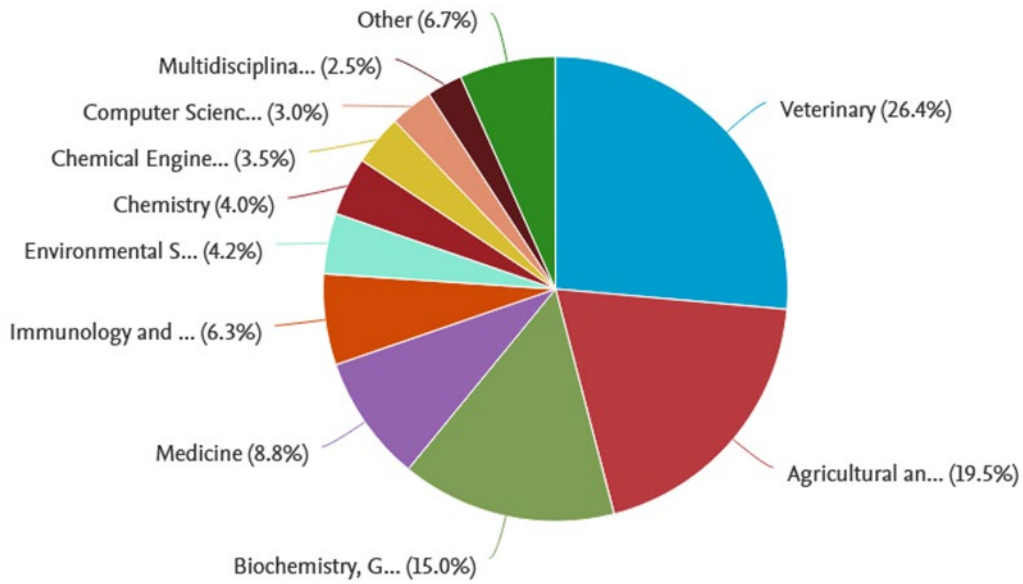
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