



UNIVERSIDAD DE CORDOBA

FACULTAD DE VETERINARIA
GRADO DE VETERINARIA
2024/25 YEAR
PATOLOGÍA QUIRÚRGICA



Course details

Course name: PATOLOGÍA QUIRÚRGICA**Code:** 101479**Degree/Master:** GRADO DE VETERINARIA**Year:** 4**Field:** ANESTESIOLOGÍA Y PATOLOGÍA QUIRÚRGICA**Character:** OBLIGATORIA**Duration:** ANUAL**ECTS Credits:** 12.0**Classroom hours:** 120**Face-to-face classroom percentage:** 40.0%**Study hours:** 180**Online platform:** <https://moodle.uco.es/>

Coordinating teacher

Name: FERNÁNDEZ SARMIENTO, JOSÉ ANDRÉS**Department:** MEDICINA Y CIRUGÍA ANIMAL**Office location:** Dpto. Medicina y Cirugía Animal. Edificio "Francisco Santisteban" (Hospital Clínico Veterinario). Campus de Rabanales.**E-Mail:** v12fesaj@uco.es**Phone:** 957211076

Brief description of the contents

"Surgical Pathology" is a key subject in the field of Veterinary Medicine and Surgery, essential for the education and clinical training of the veterinary professional. Surgical treatment is indicated for many of the pathologies suffered by animals. Therefore, it is necessary to know how to explore, diagnose and establish a correct surgical indication in those cases in which it is necessary, as well as to know how to carry out the procedure successfully and be able to resolve any possible complications that may occur, so it is also necessary to know the patient's response to surgery in order to be able to guide the actions during the perioperative period.

"Surgical Pathology" has an important theoretical component but also a relevant practical component, in which the theoretical knowledge acquired must be applied. It is also necessary to learn the basic manual skills in order to carry out surgical treatments with minimum injury and sequelae for the patient. After passing this subject, the student acquires general knowledge related to the fundamentals of surgery, as well as the knowledge to diagnose pathological processes that require surgical treatment in both small and large animals. It also provides knowledge of the surgical techniques applied in veterinary medicine to domestic animals at the level of the head, neck, thorax, abdomen, limbs and podiatry.

Prerequisites

Prerequisites established in the study plan

It is mandatory that students have at least a B-1 level in English language to participate in the English group.

Recommendations

It is strongly recommended to have taken the following subjects: "Systematic Anatomy", "Neuroanatomy and Topographic Anatomy", "General Pathology", "Diagnostic Imaging", and "Clinical Propedeutics".

Study programme

1. Theory contents

The subject consists in three blocks:

- General fundamentals.
- Surgical pathology of large animals.
- Surgical pathology of small animals.

SURGICAL PATHOLOGY. GENERAL FUNDAMENTALS

Lesson 1. Surgical pathology: etymological concept and definition, terminology. Classification of operations, general concepts. Operative indications and contraindications. Preparation prior to the surgical operation. Asepsis, antisepsis, disinfection. Preparation of the patient, surgical area. Instruments. Basic principles of sterilization. Preparation of surgical personnel (developed in practice).

Lesson 2. Surgical approaches. General techniques: catheterization, injection and division of tissues (bloody and bloodless). Material and instruments. Technique. Classification. Care and complications of each approach.

Lesson 3. Surgical hemostasis. Definition. Classification. Techniques of preventive surgical hemostasis and definitive or curative surgical hemostasis. Medicated hemostasis.

Lesson 4. Sutures: materials and techniques (developed in practice).

Lesson 5. Bandages: Classification, materials and techniques (developed in practice).

Lesson 6. Tissue repair. Definition and phases of healing. Clinical evolution of healing. Factors influencing healing. Pathological scarring.

Lesson 7. Wound treatment: bites, burns, abscesses. Drains and dressings.

Lesson 8. Surgical pathology of the skin and subcutaneous. Making plastias and flaps.

Lesson 9. General principles of oncological surgery. Tumorectomy. Biopsy. Mammary tumors.

Lesson 10. Surgical approaches to thoracic and abdominal cavity: thoracotomy and laparotomy. Basic surgical techniques: Orchidectomy and ovariohysterectomy.

Lesson 11. Hernias. General Surgical Treatment of Hernias.

Lesson 12. Fundamentals of orthopedic surgery and traumatology. Bone healing.

Lesson 13: Fractures: Etiology, classification, diagnosis and primary treatment.

Lesson 14: Surgical treatment of fractures: Decision making in fracture management. Fracture reduction material and technique. Bone grafting.

Lesson 15: Fracture fixation systems: Osteosynthesis screws.

Lesson 16: Fracture fixation systems: Osteosynthesis plates.

Lesson 17: Fracture fixation systems: intramedullary nail, interlocking nail, kirschner wires, cerclages.

Lesson 18: Fracture fixation systems: tension band and external fixation.

Lesson 19: Principles of joint surgery. Degenerative joint disease: arthrodesis, arthroplasty. Osteochondrosis.

Lesson 20: Minimally invasive surgery: Fundamentals and technique of arthroscopy and laparoscopy.

SURGICAL PATHOLOGY OF LARGE ANIMALS

SOFT TISSUES IN LARGE ANIMALS

Lesson 21. HEAD. Nasal cavity and paranasal sinuses. Neoplasms. Trauma.

Lesson 22. HEAD. Oral cavity. Trauma. Dentistry. Dentigenic cyst.

Lesson 23. RESPIRATORY: Surgery of the upper respiratory tract of equines.

Lesson 24. RESPIRATORY: Pharynx - Soft Palate. Guttural pouches.

Lesson 25. RESPIRATORY. Larynx-Laryngeal Paralysis in the Horse.

Lesson 26. DIGESTIVE. Esophagus - Esophageal obstruction. Exploration of the Abdominal Cavity - Exploratory Laparotomy. Surgical Considerations in Abdominal Surgery.

Lesson 27. DIGESTIVE. Obstructive Syndrome. Acute Abdomen Syndrome. Surgical Colic I.

Lesson 28. DIGESTIVE. Surgical Colic II. Peritonitis-Peritoneal Adhesions.

Lesson 29. DIGESTIVE. Umbilical and inguinal hernia in the horse.

Lesson 30. DIGESTIVE. Traumatic Ventral Hernia. Incisional hernia. Eventrations-Eviscerations. Rectum-Anus.

Lesson 31. Surgery of the genito-urinary system in the mare.

Lesson 32. Surgery of the genito-urinary apparatus of the stallion.

Lesson 33. Surgery in equine neonatology.

Lesson 34. Cesarean section. Different approaches. Suture techniques in utero. Abdominal wall closure.

Lesson 35. Most frequent surgical approaches in the digestive system of ruminants. Ruminocentesis. Ruminotomy. Dystopia of the abomasum in the cow.

TRAUMATOLOGY AND PODIATRY IN EQUINES

Lesson 36. Diagnosis of lameness in the horse. Types of claudication in the horse. Conformation and lameness. Degrees of lameness. Diagnostic techniques.

Lesson 37. Diseases of the forelimbs in the horse. Back lameness. Bicipital bursitis. Myositis of the back muscles. Rupture of the ventral serratus muscle. Suprascapular nerve palsy. Radial nerve palsy. Pathologies of the horse elbow. Elbow pad. Fractures of the ulna. Angular deformities of the distal radius epiphysis. Other pathologies of the carpus of the horse.

Lesson 38. Diseases of the hind limbs in the horse. Pelvis pathologies. Sacro-iliac joint syndrome. Dorsal dislocation of the patella. Fibrotic myopathy. "Arpeo". "Esparavan".

Lesson 39. Metacarpal, metatarsal and phalangeal diseases. Traumatic problems in tendons and ligaments. Metacarpal and metatarsal fractures. Condylar fractures. Exostosis. Proximal sesamoid fractures. Sesamoiditis. Phalangeal diseases.

Lesson 40. Pathologies of the hoof: alterations in the palm and the rampart: Associated with horseshoeing. Contusions. Infections. White line disease. Coronary wounds. Ossification and necrosis of fibrocartilage.

Lesson 41. Laminitis. Corrective treatment. Surgical treatments.

Lesson 42. Navicular syndrome. Lameness of the caudal part of the hoof.

Lesson 43. Horseshoeing and shoeing horses: Shoeing tools. Horseshoeing techniques. Horseshoes: types, parts and accessories. For what and when is shoeing done?

SMALL ANIMAL SURGICAL PATHOLOGY

SOFT TISSUES IN SMALL ANIMALS

- Lesson 44. Diseases of the pinna and ear. Otohematoma, ear canal resection, bullectomy.
- Lesson 45. Basic surgical procedures in dentistry. Palatal defects. Salivary gland surgery.
- Lesson 46. Brachycephalic syndrome (rhinoplasty, staphyllectomy, laryngeal ventricles resection). Tracheal surgery (temporary and permanent tracheostomy).
- Lesson 47. Thoracic surgery. Thoracocentesis, pulmonary lobectomy, patent ductus arteriosus, pericadectomy.
- Lesson 48. Costal wall surgery. Diaphragmatic hernia.
- Lesson 49. Esophagus and stomach surgery in small animals. Megaesophagus, gastrotomy, gastrectomy, pyloromyotomy, pyloroplasty. Gastric dilatation-volvulus syndrome.
- Lesson 50. Small intestine surgery. Obstructive syndrome, linear foreign bodies, intussusception.
- Lesson 51. Large intestine surgery. Megacolon.
- Lesson 52. Spleen surgery.
- Lesson 53. Surgery of the liver and biliary system. Hepatic lobectomy, cholecystectomy, portosystemic shunt.
- Lesson 54. Surgery of the endocrine system: pancreas, adrenal gland, thyroid, parathyroid.
- Lesson 55. Surgery in the perineal region. Rectal prolapse, perineal fistulas, saculectomies.
- Lesson 56. Perineal hernia (herniorrhaphy, muscle transposition, deferentopexy).
- Lesson 57. Renal and ureteral surgery. Biopsies, nephrotomy, nephrectomy, ectopic ureter.
- Lesson 58. Bladder and urethral surgery. Cystotomy, cystectomy, urethrotomy, canine scrotal and feline perineal urethrostomy.
- Lesson 59. Ovarian-uterus surgery (pyometra, cesarean section) and sexual glands (marsupialization and prostatic omentalization).
- Lesson 60. Vagina-vulva surgery. Episiotomy, vaginal floor hyperplasia, episio-plasty.

TRAUMATOLOGY AND ORTHOPEDICS IN SMALL ANIMALS.

- Lesson 61. Scapula. Scapulohumeral joint: osteochondritis dissecans of the shoulder, dislocation of the scapulohumeral joint, bicipital tenosynovitis, supraspinatus muscle contracture.
- Lesson 62. Humeral fractures: epiphyseal, diaphyseal and supracondylar fractures.
- Lesson 63. Elbow joint. Elbow dysplasia: Fragmentation of the medial coronoid process of the ulna, non-union of the anconeal process, osteochondritis dissecans humerus, elbow incongruence. Elbow luxation.
- Lesson 64. Radius and ulna fractures: epiphyseal and diaphyseal fractures, radio-ulnar growth deformities, premature closure of the distal growth plate of the radius and/or ulna.
- Lesson 65. Pelvic fractures: acetabular fractures, iliac fractures, ischial, pubic, sacroiliac dislocation.
- Lesson 66. Coxofemoral joint: hip dysplasia.
- Lesson 67. Coxofemoral joint: hip luxation, Legg-Calve-Perthes disease.
- Lesson 68. Femoral fractures: Epiphyseal, diaphyseal and physeal fractures. Fractures of patella.
- Lesson 69. Stifle joint: Cranial cruciate ligament rupture, meniscus injury.
- Lesson 70. Stifle joint: Patella luxation, Osteochondrosis of the stifle.
- Lesson 71. Fractures of the tibia and fibula: epiphyseal and diaphyseal fractures.
- Lesson 72. Carpal joint: carpal fractures, carpal luxation. Tarsal joint: Osteochondrosis of the tarsus.

Tendinopathies of the Achilles tendon.

Lesson 73. Metacarpal, metatarsal and phalangeal fractures and luxations. Treatment of other fractures.

Lesson 74. Forelimb amputation. Hind limb amputation. Phalanx amputation.

Lesson 75. Maxillary and mandibular fractures. Temporomandibular joint disorders.

Lesson 76. Fundamentals of neurosurgery: general principles and techniques. Spine surgery.

2. Practical contents

The practices of the subject consist of:

REGULATED PRACTICES:

- Practice 1: Sutures I.
- Practice 2: Sutures II.
- Practice 3: Surgical material.
- Practice 4: Preparation of the operative field: patient and surgeon.
- Practice 5: Basic bandages in small animals.
- Practice 6: Workshop on osteosynthesis.

CLINICAL ASSISTANCE PRACTICES:

- Clinical practice in small and large animals surgery.
- Oral exposition of clinical cases.

SEMINARS:

- Seminar 1: Sterilization methods.
- Seminar 2: Bandages in horses.
- Seminar 3: Clinical cases of surgical procedures in horses.
- Seminar 4: Clinical cases of surgical procedures in small animal.

Bibliography

BIBLIOGRAFÍA BÁSICA:

PEQUEÑOS ANIMALES:

- MORGAZ, DOMÍNGUEZ, FERNÁNDEZ. Manual Clínico de Cirugía tejidos blandos pequeños animales, Ed. Elsevier.
- TOBIAS. Veterinary Surgery: Small Animal. Elsevier Ed.
- FOSSUM. Small Animal Surgery. Mosby Ed.
- SLATTER. Textbook of Small Animal Surgery. Saunders Ed.
- BOJRAB. Current Techniques in Small Animal Surgery. Lea and Febiger Ed.
- MONNETT. Small Animal Soft Tissue Surgery. Wiley-Blackwell Ed.
- BRINKER & PIERMATTEI. Ortopedia y reparación de fracturas de pequeños animales. Saunders Ed.

EQUINOS:

- ADAMS & FESSLER. Atlas of Equine Surgery. W.B. Saunders Company Ed.
- AUER. Equine Surgery. Saunders Ed.
- COLAHAN, MERRIT, MOORE & MAYHEW. Equine Medicine and Surgery. Mosby Ed.
- JENNINGS. Texto de Cirugía de los Grandes Animales. Ed. Salvat.

- MCILWRAITH & TURNER. Techniques in Large Animal Surgery. Lea and Febiger Ed.
- BAXTER. Adams and Stashak´s Lameness in horses. Wiley-Blackwell Ed.

BIBLIOGRAFÍA COMPLEMENTARIA:

- MUÑOZ. Manual Clínico del Perro y el Gato. 2ed. Elsevier Ed.
- WHYTE & SAN ROMAN. Odontología en el Perro, Gato y Exóticos. Marbán Ed.
- VERSTRAETTE & LOMMER. Oral and Maxillofacial Surgery in Dogs and Cats. Saunders Elsevier Ed.
- PAVLETIC. Atlas of small animal wound management and reconstructive surgery. Wiley-Blackwell Ed.
- SWAIN & RENBERG. Small Animal Bandaging, Casting and Splinting Techniques. Wiley-Blackwell Ed.
- PIERMATTEI & JOHNSON. An Atlas of Surgical Approaches to the Bones and Joints of the Dog and Cat. Saunders Ed.

Methodology

General clarifications on the methodology (optional)

THEORETICAL CLASSES: The explanation of the contents in the classroom is done through interactive classes that seek the participation of students, supported by PowerPoint presentations and videos.

REGULATED PRACTICES: They are performed to explain the fundamental contents of the subject and for the students to acquire the skills of the surgical activity.

Suture practices (Suture I and Suture II) are performed on suture educational models (to perform Suture II practice, Suture I practice must have been previously done).

The practice of basic bandages in small animals consists of a theoretical-practical session, and different types of bandages are elaborated on live dogs and/or mannequins.

The practice of surgical material consists of a theoretical-practical session, and the handling of the most used instruments in veterinary surgery is explained.

The practice of preparation of the operative field consists of a theoretical-practical session in which the student learns and practices the surgical washing of hands, the application of sterile gloves, and the application of the surgical gown, among other activities.

The osteosynthesis workshop consists of a first contact with the main methods of osteosynthesis for fracture stabilization.

SEMINARS:

The sterilization methods seminar explains the main sterilization systems.

The equine bandaging seminar is an activity highlighting the clinical use of this technique for equine procedures.

The seminar of clinical cases in equids is an activity in which clinical cases of surgical pathologies in equids will be presented, in which students will actively participate in the resolution of the problems exposed.

The seminar of clinical cases in small animals is an activity in which surgical procedures in dogs and cats will be presented, in which the students will actively participate in the resolution of the problems exposed.

CLINICAL ASSISTANT PRACTICES: The clinical assistant practices of surgical cases in both small and large animals will be carried out in small group of 6 students with two professors in each session (we consider it imprudent to convene larger groups for reasons of operating room capacity, maintenance of asepsis principles, and obvious reasons of safety in anesthesia and surgery). They will be held on three days of the same week in the Small and Large Animal Surgery Services of the HCV of the UCO. During these sessions, practical and theoretical contents are studied, aiming at the teaching-learning of:

- Structure and normal physiology of healthy animals, transmit knowledge of the alterations of the structure and function of the animal organism, and on the general bases of medical-surgical treatments.
- To know how to perform the clinical history and physical examination of animals.
- Diagnose the most common surgical diseases, using different general and instrumental techniques. Interpretation of complementary tests.
- Participate in the most common medical-surgical treatments in small and large animals.
- Analyse, synthesize, solve problems, and make decisions in the professional areas of the clinical veterinarian.
- Work as part of a team, and show respect, appreciation, and sensitivity to the work of others.
- Maintain ethical behaviour in the exercise of their responsibilities to the veterinary profession and society.
- Respect and care for animal welfare always.

During the days that the students attend the assistance practices, they must choose one of the clinical cases they witness. They must prepare an oral presentation on this case in groups of 2-4 students and defend it in front of their classmates and a professor of the course.

Methodological adaptations for part-time students and students with disabilities and special educational needs

In accordance with the general conditions of the methodology, the particularities of part-time students or students who have some type of disability or special educational needs will be taken into account, guaranteeing at all times that students can access both the theoretical and practical content of the course.

Face-to-face activities

Activity	Large group	Medium group	Small group	Total
<i>Assessment activities</i>	-	-	1	1
<i>Information processing activities</i>	-	6	-	6
<i>Oral communication activities</i>	-	3	-	3
<i>Practical experimentation activities</i>	-	-	45	45
<i>Projects based on the course contents</i>	60	-	-	60
<i>Tutorial action activities</i>	-	-	5	5
Total hours:	60	9	51	120

Off-site activities

Activity	Total
<i>Information processing activities</i>	170
<i>Information search activities</i>	10
<i>Total hours</i>	<i>180</i>

Results of the training and learning process

Knowledge, competencies and skills

- CU1 Accredit the use and mastery of a foreign language.
- CU2 Know and improve the user's level in the ICT field.
- CU3 Promote active job search habits and a capacity for enterprise
- CT1 Problem solving.
- CT2 Teamwork
- CT3 The ability to apply knowledge to practice
- CT4 Decision-making.
- CT5 Ethical commitment
- CT6 A capacity for analysis and synthesis
- CT7 Research skills
- CT8 Quality-driven
- CE35 Clinical study, diagnosis and medical/surgical treatment of animals.
- CE36 Surgical techniques used in veterinary medicine.

Assessment methods and instruments

Intended learning outcomes	Attendance checklist	Examination	Means of practical execution	Oral means
<i>CE35</i>	X	X	X	X
<i>CE36</i>	X	X	X	X
<i>CT1</i>		X	X	X
<i>CT2</i>		X		
<i>CT3</i>	X	X	X	X
<i>CT4</i>	X	X	X	X

Intended learning outcomes	Attendance checklist	Examination	Means of practical execution	Oral means
CT5		X		
CT6		X		X
CT7		X		
CT8		X		
CU1		X		
CU2		X		
CU3	X			
Total (100%)	20%	60%	10%	10%
Minimum grade (*)	5	5	0	0

(*)Minimum mark (out of 10) needed for the assessment tool to be weighted in the course final mark. In any case, final mark must be 5,0 or higher to pass the course.

General clarifications on instruments for evaluation:

Evaluation criteria:

- Acquisition of theoretical knowledge.
- Attitude, involvement and use of the theoretical and practical sessions.
- Attendance to theoretical and practical classes.

Evaluation instruments:

- Partial and final exams.
- Evaluation and attendance of practices and seminars: Practice 1 (Sutures I), Practice 2 (Sutures II), Practice 3 (Surgical material), Practice 4 (Preparation of the operative field, patient and surgeon), Practice 5 (Surgical material: Patient and surgeon), Practicum 5 (Basic dressings in small animals), Practice 6 (Osteosynthesis workshop), Clinical assisting practices in small and large animal surgery, Seminar 1 (Sterilization methods), Seminar 2 (Dressings in horses), Seminar 3 (Clinical cases of surgical procedures in horses), Seminar 4 (Clinical cases of small animal surgical procedures).
- Oral presentation and defense of a clinical case.
- Practical exam.

The evaluation systems used will be:

- Exams at the end of each theoretical thematic block (60%): The total evaluation of the three thematic blocks will have a value of 60% (60 points out of 100):
- General fundamentals (20%): multiple-choice exam with a value of 8 points (for each incorrect answer 0.33 points will be subtracted), and 6 questions to be developed with a value of 2 points each (12 points in total). This block will be scored with a maximum of 20 points.
- Surgical Pathology of Large Animals (20%): multiple-choice exam with a value of 8 points (for each

incorrect answer 0.33 points will be subtracted), and 6 questions to be developed with a value of 2 points each (12 points in total). This block will be scored with a maximum of 20 points.

- Surgical Pathology of Small Animals (20%): multiple-choice exam with a value of 8 points (for each incorrect answer 0.33 points will be subtracted), and 6 questions to be developed with a value of 2 points each (12 points in total). This block will be scored with a maximum of 20 points.

A minimum of 2 partial exams will be taken throughout the course. The partial exam of each thematic block is passed with a minimum grade of 11 points (out of 20 points). In these partial exams, the existence of two questions with a score of zero lead to the exam is not passed. The content of the theoretical block passed is kept until the July exam, inclusive.

In the ordinary exams of June and July, the student must pass each of the three blocks separately, not averaging between them until they have passed them individually. In the extraordinary exams, as well as in the September exam, the theoretical exam will be in any case of the whole subject, and it is required to obtain 50% of the valuation destined to this part of the evaluation to pass it.

- Practice (20%): The evaluation of the practical part of the subject will constitute 20% (20 points out of 100). Attendance to the regulated practices, as well as to seminars and assistance practices is MANDATORY. Unexcused absence will result in the loss of 20 points for each practical activity or seminar not attended. The attendance control will be done by the teacher at the beginning or at the end of the session. Attendance, attitude, interest, implication and use in this type of practical activities will be valued: Practical 1 (2 points), Practical 2 (2 points), Practical 3 (2 points), Practical 4 (2 points), Practical 5 (2 points), Practical 6 (2 points), Seminar 1 (2 points), Seminar 2 (1 point), Seminar 3 (1 point), Seminar 4 (1 point). Clinical assisting practices in small and large animal surgery are evaluated over 3 points. The evaluation obtained in this section is kept for those repeating students who wish to do so. To do so, they must apply in writing to the subject coordinator at the beginning of the academic year. Collaborators students of the subject, as well as the internal students of the HCV of the current or the immediately previous academic year of both the small animal and large animal units can request the validation of the clinical assisting practices. To do so, they must apply in writing and provide supporting documentation at the beginning of the course. If a student intern of the HCV requests the validation, and subsequently is removed from his work or voluntarily leaves the HCV, we reserve the right to revoke the validation. IMPORTANT: The validation of the internship does not exempt the student from performing the oral presentation, so he/she should contact his/her classmates to integrate and participate actively in the oral presentation and defense of a clinical case.

- Oral presentation (10%): The oral presentation and defense of the chosen clinical case will constitute 10% of the final grade (10 points out of 100). This clinical case will be elaborated in groups of 2-4 students during their days of clinical practice. Students must gather as much information as they consider appropriate to prepare an adequate oral presentation and defense of the clinical case. All students should participate in the oral presentation in turn. These presentations will have a maximum duration of 20 minutes and will be convened a minimum of two weeks after the clinical practice. The evaluation obtained in this section will be kept for those repeating students who wish to do so. To do so, they must request it in writing to the subject coordinator at the beginning of the academic year.

- Practical exam (10%): The practical exam will constitute 10% of the final grade (10 points out of 100). After finishing all the regulated practices (practices 1 to 6), a final practical exam will be held. To take this exam, students must have completed all the regulated practices. The evaluation obtained

in this section will be kept for those repeating students who wish to do so. To do so, they must request it in writing to the subject coordinator at the beginning of the academic year.

The FINAL EVALUATION of the course corresponds to the sum of the qualifications of the four blocks described above, and a maximum of 100 points can be obtained.

IMPORTANT NOTE: The evaluations of the Practice, Oral presentation and Practical Exam will not be added to the final grade until the theoretical part of the course has been passed.

Clarifications on the methodology for part-time students and students with disabilities and special educational needs:

Based on the general evaluation criteria, the factors that affect part-time students or students who have a disability or special needs will be taken into account in a personalized manner.

Clarifications on the evaluation of the extraordinary call and extra-ordinary call for completion studies:

The evaluation of the student will be considered in the "first extraordinary call" and in the "extraordinary call for completion of studies" when the student has the requirements to be able to request this type of extraordinary exam. In these calls, students must take a theoretical exam with questions to be developed and/or multiple-choice tests

in which the theoretical-practical knowledge of the whole subject is evaluated. In order to pass the exam

a minimum grade of 5 points is required (considering the total grade out of 10 points).

Qualifying criteria for obtaining honors:

Students with a grade equal to or higher than 9.25 and who demonstrate excellence in the development of the competencies required in the subject will obtain de qualification "Matrícula de Honor".

Sustainable development goals

Good health and well-being
Quality education
Decent work and economic growth
Sustainable cities and communities

Other Faculty

Name: ARGÜELLES CAPILLA, DAVID

Department: MEDICINA Y CIRUGÍA ANIMAL

Office location: Dpto. Medicina y Cirugía Animal. Edificio "Francisco Santisteban" (Hospital Clínico Veterinario). Campus de Rabanales.

E-Mail: cu2arcad@uco.es

Phone: 957211091

Name: DOMÍNGUEZ PÉREZ, JUAN MANUEL

Department: MEDICINA Y CIRUGÍA ANIMAL

Office location: Dpto. Medicina y Cirugía Animal. Edificio "Francisco Santisteban" (Hospital Clínico Veterinario). Campus de Rabanales.

E-Mail: pv2dopej@uco.es

Phone: 957211090

Name: MORGAZ RODRÍGUEZ, JUAN

Department: MEDICINA Y CIRUGÍA ANIMAL

Office location: Dpto. Medicina y Cirugía Animal. Edificio \"Francisco Santisteban\" (Hospital Clínico Veterinario). Campus de Rabanales.

E-Mail: v92moroj@uco.es

Phone: 957212647

Name: QUIRÓS CARMONA, SETEFILLA

Department: MEDICINA Y CIRUGÍA ANIMAL

Office location: Dpto. Medicina y Cirugía Animal. Edificio \"Francisco Santisteban\" (Hospital Clínico Veterinario). Campus de Rabanales.

E-Mail: v42quics@uco.es

Phone: 957212647

The methodological strategies and the evaluation system contemplated in this Teaching Guide will respond to the principles of equality and non-discrimination and must be adapted according to the needs presented by students with disabilities and special educational needs in the cases that are required. Students must be informed of the risks and measures that affect them, especially those that may have serious or very serious consequences (article 6 of the Safety, Health and Welfare Policy; BOUCO 23-02-23).
