

Degree programme	Type	Course
Veterinary Medicine	OP	5

Contact lecturer

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Teaching staff

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Group languages

You can consult this information at the [end](#) of the document.

Prerequisites

Although there are no specific mandatory prerequisites, the student is recommended to have passed subjects such as Animal Reproduction, Pharmacology, Surgery and Anesthesiology in the third year and Medicine and Surgery in Pets I and II in the fourth year.

Objectives

Advances in Traumatology and Soft Tissue Surgery is a subject that aims to provide students advanced knowledge in the subjects of Traumatology and Soft Tissue Surgery. With this subject the student achieves advanced clinical knowledge in pathologies of surgical treatment affecting both soft tissues or the musculoskeletal system.

The main training objectives of the subject are:

Acquire the ability to develop different diagnostic protocols for surgical pathologies and traumatology.

Be able to carry out a surgical therapeutic plan adapted to each clinical case.

Know the basics of a complete traumatological examination fundamental for the subsequent diagnosis of different pathologies.

Properly understand the basics of the most advanced surgical techniques in soft tissue surgery and traumatology.

Learning outcomes

1. Analyse, synthesise and resolve problems and make decisions.
2. Apply scientific method to professional practice, including medicine
3. Apply ethical values that govern the behavior of veterinarians in clinical practice in relations with other veterinarians.
4. Defend the ethical values that determine the decision making in diagnostic procedures, medical or surgical treatment or any medical procedure, subject to the rights of animals and their owners.
5. Diagnose and treat the main traumatology and orthopaedic disorders in small animals and equines.
6. Recognise the moment when a case needs to be passed to a specialist for diagnosis and/or treatment, and if required, or not, an urgent examination.
7. Interpret the results of diagnostic tests (analytical tests, X-rays, echography, endoscopy, PCR, serology...) that are fundamental for advanced diagnosis in the medication and surgery of small, equine and exotic animals.
8. Explain the general principles of the medical and surgical treatments of traumatology and orthopaedic disorders in small, equine and exotic animals.
9. Define the general principles of special surgery (thoracic, tumours, special surgery of the digestive system...).
10. Properly apply knowledge acquired on sedation and pain therapy to interventions in the nervous system, ophthalmology, traumatology and orthopaedics, and special surgery.
11. Apply and interpret control and surveillance systems in ICU, hospitalisation and surgery, specifically in complex interventions on animals with serious disorders of the general state or interventions in neurology, ophthalmology, traumatology and orthopaedics or special surgery.
12. Fill in anamnesis and exploration records in all clinical specialities.
13. Realise complete basic examinations in different clinical specialities (dermatology, neurology, ophthalmology, traumatology and orthopaedics...).
14. Define the problems found in physical examinations or clinical record of an animal, and produce a list of problems, differential diagnosis and the diagnostic protocol in all clinical specialities and for different species.
15. Fill in reports on surgical and diagnostic techniques used on patients.
16. Handle different autochthonous wildlife species in a safe way for them and the veterinarian.
17. Hold animals when performing examinations, caring or taking samples in a way that causes the minimum possible stress and be able to explain to other people how to do the same.
18. Identify the biopsy techniques that can be applied for obtaining samples of different organs and tissues.
19. Recognise personal limitations and know when to ask for professional advice and help.
20. Perform a hemogram and blood test with emergency equipment, and recognise the limitations of these systems and defend interpretations.
21. Show responsibility regarding the need to perform necessary complementary tests on the patient and know how to evaluate the meaning and integrate it in the evolution of hospitalised patients of different species.
22. Perform differential diagnoses and diagnostic plans, taking into account the available complementary techniques applied to all clinical specialities and different species.
23. Properly use all radiographic protection measures and describe applicable legislation.
24. Determine the ideal positions to obtain radiographic images of the different pathological processes and X-rays and use and apply contrast methods in small, equine, exotic and zoo animals.
25. Apply the concepts acquired for recognition and manipulation of instruments, manipulation of tissues, haemostasis, drainage and sutures, as well as helping effectively in surgical interventions recognising the typical instruments of surgical specialities (traumatology and orthopaedics, thoracic surgery, ophthalmology, neurology, exotic...).
26. Properly treat wounds (cleansing, debridement and additional cures) and apply basic bandages.
27. Adequately close surgical wounds of different considerations.
28. Perform the basic surgical procedures of different clinical specialities and take samples in small, equine, exotic and zoo animals.
29. Evaluate whether the concepts of asepsis-antisepsis, preparation of surgery and preparation of the surgical patient and the material and instruments to be used have integrated properly, along with their application to the operating theatre depending on the type of intervention and the animal species.
30. Monitor animals during surgical and/or anaesthetic recovery in different species, including wildlife.
31. Objectively evaluate the pain of sick animals and decide on the analgesia scheme depending on the species, age, location and cause of the pain and the state of the patient.
32. Plan the most suitable anaesthetic protocol depending on the animal species and the general state of

- the patient, as well as the type of intervention required.
33. Properly calculate the doses of medicine for different animal species. Know the limitations of some drugs depending on the species or even the breed, as well as the specific contraindications.
 34. Recognise the adverse effects that different medications can cause and observe established pharmacovigilance legislation
 35. Recognise the disorders that require urgent assistance and know how to prioritise them by severity.
 36. Recognise the main problems that will require emergency surgery.
 37. Identify and treat the processes that affect the reproduction apparatus of male and females in small, equine and exotic animals.
 38. Care for neonates after delivery or a caesarean.
 39. Properly apply euthanasia to small, equine and exotic animals.
 40. Identify the conditions in which euthanasia is the only possible option, or the most suitable, depending on the general state of the sick animal and appropriately propose this to the owners.

Contents

THEORETICAL CONTENT (16 hours)

- Topic 1: Orthopedic Examination of the Patient (1 h)
- Topic 2: Shoulder Joint (1 h)
- Topic 3: Elbow Dysplasia (1 h)
- Topic 4: Patellar Luxation (1 h)
- Topic 5: Premature Physeal Closure and Growth Disorders (1 h)
- Topic 6: Hip Luxation (1 h)
- Topic 7: Hip Dysplasia I (1 h)
- Topic 8: Hip Dysplasia II (1 h)
- Topic 9: Cranial Cruciate Ligament Rupture I (1 h)
- Topic 10: Cranial Cruciate Ligament Rupture II (1 h)
- Topic 11: Arthrodesis (1 h)
- Topic 12: Musculotendinous Disorders (1 h)
- Topic 13: Rectal and Anal Surgery (1 h)
- Topic 14: Male and Female Reproductive System I (1 h)
- Topic 15: Perineal Hernias and Salivary Glands (1 h)
- Topic 16: Nephrectomies (1 h)

PRACTICAL CONTENT (20 hours)

On-site Practical Sessions

SESP Seminars

1. AO Method
2. Surgical Approaches
3. Interlocking Nails
4. Forelimb Fractures and Clinical Cases

5. Hindlimb Fractures and Clinical Cases

PLC

Orthopedics and Traumatology Workshop

PCAS

Orthopedic Consultations and Surgeries at the Veterinary Teaching Hospital (HCV).

Learning activities and methodology

Title	Hours	ECTS	Learning outcomes
Theoretical lectures	16	0.64	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
workshops	2	0.08	1, 13, 14, 15, 16, 17, 23
Seminars	10	0.4	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
Clinical practical work	8	0.32	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
Study and non-contact training	37.5	1.5	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

The teaching methodology, based on a face-to-face format, includes the presentation in the classroom of the topics (theoretical lectures and seminars) described in the content section. The workshop will be scheduled in small working groups and will be supervised by the teaching team.

The PCAs will be developed in the surgical room and appointments room of the HCV.

Annotation: within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continuous assessment activities

Title	Weight	Hours	ECTS	Learning outcomes
Assessment of x-rays and clinical-case images related to the matter	25%	0.5	0.02	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
Short questions related to seminars and workshop	25%	0.5	0.02	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
Multiple choice questions	50%	0.5	0.02	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

This course does not provide for a single-assessment system.

Assessment will be based on:

- Short-answer questions related to the seminars and workshop (25%)
- Multiple-choice test questions covering the course syllabus (50%)
- Assessment of radiographs or clinical images related to the course (25%)

Attendance at the workshop and seminars is mandatory in order to pass the course.

"The commission of any irregularity in an assessment activity (academic fraud, plagiarism, or improper use of AI, unless such use is expressly authorized in the course guide) that may result in a significant alteration of the grade will lead to that activity being graded as 0.

If the course guide establishes that obtaining a minimum grade in this assessment activity is an essential requirement for passing the course, or if multiple irregularities occur in assessment activities within the same course, the final grade for the course will be 0.

Furthermore, disciplinary proceedings may be initiated against any student who commits any of these irregularities."

Bibliography

DeCamp CE (2016) Brinker WO, Piermattei DL, Flo GL. Handbook of Small Animal Orthopedics & Fracture Treatment. 5th Ed. WB Saunders Co. Philadelphia. 2016.

Fossum TW. (2018) Small Animal Surgery. 5a ed. Elsevier, St. Louis

Donald L. Piermattei, Kenneth A. Johnson. An Atlas of Surgical Approaches to the Bones and Joints of the Dog and Cat. Saunders 2014.

Software

Microsoft office / Adobe acrobat

Course groups and languages

The information provided is provisional until November 30. After this date, you will be able to consult the language of each group through this [link](#). To access the information, you will need to enter the course CODE

Type of teaching	Group	Language	Semester	Shift
(TE) Theory	1	Catalan/Spanish	annual	morning-mixed
(SEM) Seminars	1	Catalan/Spanish	annual	morning-mixed
(PCAv) Pràctica clínica assistencial veterinària	1	Catalan	annual	morning-mixed
(PQV) Pràctica en quiròfans veterinaris docents	1	Catalan/Spanish	annual	morning-mixed
(SEM) Seminars	2	Catalan/Spanish	annual	morning-mixed
(PCAv) Pràctica clínica assistencial veterinària	2	Catalan	annual	morning-mixed
(PQV) Pràctica en quiròfans veterinaris docents	2	Catalan/Spanish	annual	morning-mixed
(SEM) Seminars	3	Catalan/Spanish	annual	morning-mixed
(PCAv) Pràctica clínica assistencial veterinària	3	Catalan	annual	morning-mixed
(PQV) Pràctica en quiròfans veterinaris docents	3	Catalan/Spanish	annual	morning-mixed
(PCAv) Pràctica clínica assistencial veterinària	4	Catalan	annual	morning-mixed
(PQV) Pràctica en quiròfans veterinaris docents	4	Catalan/Spanish	annual	morning-mixed
(PCAv) Pràctica clínica	5	Catalan	annual	morning-mixed

assistencial veterinària					
(PQV) Pràctica en quiròfans veterinaris docents	5	Catalan/Spanish	annual	morning-mixed	
(PCAv) Pràctica clínica assistencial veterinària	6	Catalan	annual	morning-mixed	
(PQV) Pràctica en quiròfans veterinaris docents	6	Catalan/Spanish	annual	morning-mixed	
(PCAv) Pràctica clínica assistencial veterinària	7	Catalan	annual	morning-mixed	
(PCAv) Pràctica clínica assistencial veterinària	8	Catalan	annual	morning-mixed	
(PCAv) Pràctica clínica assistencial veterinària	9	Catalan	annual	morning-mixed	
(PCAv) Pràctica clínica assistencial veterinària	10	Catalan	annual	morning-mixed	
(PCAv) Pràctica clínica assistencial veterinària	11	Catalan	annual	morning-mixed	
(PCAv) Pràctica clínica assistencial veterinària	12	Catalan	annual	morning-mixed	
(PCAv) Pràctica clínica assistencial veterinària	13	Catalan	annual	morning-mixed	