

Domestic Animal Medicine and Surgery I

Code: 102622
ECTS Credits: 7

Degree	Type	Year	Semester
2502445 Veterinary Medicine	OB	4	1

Contact

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Use of Languages

Principal working language: spanish (spa)
Some groups entirely in English: No
Some groups entirely in Catalan: No
Some groups entirely in Spanish: No

Other comments on languages

A small part of the subject will be taught in English

Teachers

Yvonne Espada Gerlach
Josep Pastor Milán
Maria Teresa Peña Giménez
Teresa Rigau Mas
Rafael Ruíz de Gopegui Fernández
Sònia Añor Torres
Jaume Martorell Monserrat
Lluís Ferrer Caubet
Laia Maria Solano Gallego
Marta Planellas Bachs

Prerequisites

There are no official prerequisites for taking the subject. However, it is convenient for the student to have completed and passed the first three grades, especially Pathology, Exploratory methods, Animal reproduction, Pharmacology, Surgery and Anesthesiology.

Objectives and Contextualisation

Medicine and Surgery of Companion Animals I is a compulsory subject during the fourth year of veterinary degree. This subject is totally theoretical and the practices will be carried out in the subject Medicine and Surgery of Companion Animals II that is taught in the same course. It is essential and basic for subsequent clinical studies. The most frequently diagnosed diseases in the clinic of small animals will be studied. In this subject the description of the medical-surgical anomalies of the different organs and systems is explained,

including the study of the etiology, clinical signs, diagnostic methods, treatment and prognosis
The specific objectives for the student are:

- To understand and apply the principles of medicine based on evidence.
- To learn how to approach a clinical case by following the problem oriented approach (POA).
- To know the most used surgical techniques in veterinary
- To know the diseases derived from reproduction, childbirth and puerperium, as well as their treatment
- To know the bases of pharmacotherapy and its application
- This subject includes activities carried out in English, identified in this teaching guide as DA (English Teaching)

Competences

- Apply the basic cures that guarantee the correct function of the reproduction cycle and the resolution of obstetric problems.
- Demonstrate knowledge and understanding of the general bases of medical and surgical treatments.
- Demonstrate knowledge of English to communicate both orally and in writing in academic and professional contexts.
- Diagnose different individual and collective animal diseases, and know about prevention measures, with emphasis on zoonoses and notifiable disease.
- Diagnose the most common diseases using different general and instrumental techniques.
- Have basic knowledge of the profession, and in particular of the organisation and functions of professional practice.
- Recognise when euthanasia is necessary and perform it humanely by employing the appropriate method.

Learning Outcomes

1. Demonstrate knowledge of English to communicate both orally and in writing in academic and professional contexts.
2. Describe the etiology, etiopathogeny, diagnosis and treatment of the most frequent medical and surgical diseases in small, equine and livestock animals.
3. Identify and prevent problems related with handling of animals that negatively affect their health.
4. Identify and recognise the medical and surgical problems associated to the male and female reproduction apparatus in different animal species.
5. Identify congenital and acquired diseases that affect the proper absorption of foods.
6. Identify disorders of the locomotor apparatus and especially those of members and hooves.
7. Identify neurological diseases and the most relevant ones that can sporadically affect the proper systemic functions of animals.
8. Identify the most frequent metabolic disorders.
9. Identify whether the quality of life of affected animals is good enough and, if it is not, identify euthanasia as an alternative humanitarian procedure.
10. Identify, treat and prevent problems that alter lactation and the functionality of the mammary gland.
11. Identify, treat and prevent the causes of infertility in male and females.
12. Identify, treat and prevent the causes that lead to anoestrus and alter normal cyclicity.
13. Identify, treat and prevent the problems that affect neonates.
14. Interpret basic pathological X-rays and echographies.
15. Recognise pathological changes in X-rays and echographies of simple cases and interpret them properly.
16. Recognise the limitations of medicine and the general state of sick animals.

Content

The learning process of the contents of the subject takes place in an integrated way by attending the theoretical or master classes and the materials in the Virtual Campus for the development of self-learning activities.

Theoretical contents:

Block of Medicine Bases on Evidence - Analysis and discussion of clinical cases (6h):

Medicine bases on evidence: concepts and practical application.

Critical analysis of topics (critically appraised topics - CAT). Students, grouped in 3-4 people groups, will analyse a clinical question in a critical way (CAT) and deliver the written solution before the end of the course. (1h)

Discussion and analysis of the clinical case 1 (2h).

Discussion and analysis of the clinical case 2 (2h).

Discussion and analysis of the clinical case 3 (1hora).

Block IMAGE (6,5h)

Diagnostic imaging of cardiac pathologies

Diagnosis by image of respiratory pathologies

Diagnostic imaging of urinary and adrenal pathologies

Diagnosis by image of skull and spine pathologies

Diagnostic imaging of gastrointestinal pathology

Diagnostic imaging of pathology of liver, spleen, pancreas

Diagnostic imaging of pathologies of the reproductive system

Reproduction Block (6,5h)

Reproductive problems of the female (1.5 h)

Infertility (1h)

Mammary pathology (1h)

Problems of childbirth and postpartum (1h)

Reproductive problems of the male (2h)

Block M. Internal (21h)

Oral cavity. 1 hour

Esophageal diseases. 1 h

Stomach and intestine. 2 h

Acquired heart valve diseases. 1 h

Cardiopathies congenital. 1 h

Xoc. 1h

Acid base. 1 h

Thyroid. 1 h

Diabetes. 2h

Adrenal endocrinopathies. 2h

Acute and chronic renal failure. 2h

ITU and urolithiasis. 1 h

Hematological abnormalities: anemia. 1 h

Hematological abnormalities: leukocytes and leukograms. 1h

Diseases of the upper respiratory tract. 1 h

Respiratory tract diseases baixes. 1h

Cardiomyopathies. 1 h

Surgery Block (12 h)

1h Dentistry.

1 h Oral cavity: Lips, palate and nostrils. Congenital diseases, cleft lip, cheiloplasty. Fissure of the primary and secondary palate. Oronasal fistulas. Neoplasms of the oral cavity. Types and treatments. Mandibulectomy
Maxilectomy

1h Ear pathology and auricular pavilion: bruises, wounds. External, average and internal otitis. Polyps. Surgical treatments: Resection of the lateral wall of the vertical duct (Zeppo). Complete ablation of the vertical conduit. Total ablation of the external auditory canal. Miringotomy, osteotomy of the tympanic bull.

1h upper respiratory tract I (flat nasal tumors / nostrils) Rhinitis. Sinusitis. Obstructive airway syndrome in brachycephalics.

1h Pathology of the larynx itraquea: laryngeal paralysis, laryngeal collapse. Collapse of trachea, tracheotomy and permanent tracheostomy. Tracheal resections

1h Thorax I: Costal wall. Approaches (sternotomy-thoracotomy). Drenatges.Lobectomies. Pericardiectomy
Diaphragmatic hernia. chylothorax

1 h. Digestive surgery: Gastrotomy, foreign bodies. Partial gastrectomy. Delayed gastric emptying.

1h pyloroplasty. Dilation / Stomach twisting. Gastropexy

1h Intestinal Surgery: foreign bodies. Intussuscepció intestinal. Volvulus Enterotomies, Enterectomy.

1h Female reproductive system surgery. Anatomical memory, tubal ligation, ovariohysterectomy, cesarean section, pyometra. Mastectomies Male castration.

1 h. Urinary bladder surgery. Cystotomy Urethra.Uretrostomy.

1 h. Hernias Umbilical, inguinal, scrotal hernias. Congenital and acquired.

Specialties Block (10h)

Ophthalmology:

- Ophthalmologic examination
- Diagnostics Main ocular diseases in small animals

Neurology:

- Diseases of the spinal cordDiseases
- Diseases of the brain

Dermatology: "Diagnostic approach to the dermatological patient"

Traumatology:

- Introduction to traumatology
- Internal fixation methods

Exotic:

- The first visit to mammals
- Clinical techniques in mammals

Methodology

Theoretical learning will be accomplished through formal lectures in the classroom.

Lectures will be taught through PPT presentations including videos and pictures so that the student can follow the explanations.

Necessary and basic bibliography will be listed so that the student completes knowledge and supplements learning with additional text consulting.

Some of the lectures will be given in english (DA)

A methodology of critical analysis of clinical questions (CAT) will be applied and the discussion of clinical cases will be done following a *problem oriented approach*

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Clases	62	2.48	2, 8, 3, 4, 6, 5, 7, 13, 10, 12, 11, 15
Type: Autonomous			
Estudio	108	4.32	2, 8, 3, 4, 6, 5, 7, 9, 13, 10, 12, 11, 14, 15

Assessment

The evaluation will consist of the following activities:

- First partial exam will represent 45% of the final score. The exam will be based on multiple choice and short questions. To pass the partial, a score of at least 5 of 10 has to be obtained.
- Second partial exam that will represent 45% of the final grade. Exam will be based on multiple choice and short questions. To pass the partial, a score of at least 5 of 10 has to be obtained.
- The evaluation of both CAT and the 3 clinical cases will cover a 10% of the final score.

The written exam will allow to evaluate the integration of theoretical knowledge, the ability to relate concepts and analysis and, ultimately, show the final maturity of the student.

TO PASS THE SUBJECT, PASSING BOTH THE FIRST AND THE SECOND PARTIAL IS MANDATORY. If the student fails one or both partials, presenting again to the failed part is mandatory.

English evaluation:

English will be evaluated according to the following criteria:

- 0 points: insufficient in the group of oral and written expression, or does not participate. Student's vocabulary is poor and does not understand or understand with difficulty what he/she wants to express.
- 0.5 points: sufficient in the group of oral and written expression. The student understands what he/she wants to explain although he/she makes several important grammatical or style mistakes and his/her vocabulary is limited.
- 1 point: correct oral and written expression, although errors are identified.

The average of all the qualifications obtained in English will be made, and the bonus score will be applied in the exam score according to the following criteria:

0-0,34 points: the student does not receive any type of bonus

0.35-0.84 points: 5% is applied to the final score of the subject

0,85- 1 point: 10% is applied on the final score of the subject

The teacher will be the one who will ultimately mark the final bonus received by the student (between the "no bonus" up to a 10% of the final score).

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Analysis and discussion of clinical cases	10%	1	0.04	16
Examen	45%	2	0.08	1, 2, 8, 3, 4, 6, 5, 7, 9, 13, 10, 12, 11, 14, 15, 16
Examen	45%	2	0.08	1, 2, 8, 3, 4, 6, 5, 7, 9, 13, 10, 12, 11, 14, 15, 16

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