

28426 - General Pathology and Propaedeutics II

Syllabus Information

Academic year: 2023/24

Subject: 28426 - General Pathology and Propaedeutics II

Faculty / School: 105 - Facultad de Veterinaria

Degree: 451 - Degree in Veterinary Science

ECTS: 6.0

Year: 3

Semester: Second semester

Subject type: Compulsory

Module:

1. General information

The general objective of this subject is to acquire the necessary knowledge to understand the functional alterations of the organs and systems of the animal organism, which give rise to the clinical symptoms and syndromes of the diseases resulting from these alterations. This objective is complemented by learning the methods and procedures of clinical exploration of the different organs and devices, including the collection of biological samples for their evaluation, and the interpretation of the results derived from the exploration and the analyses performed.

These approaches and objectives are aligned with the Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda, specifically they will contribute to the achievement of the following goals and targets: ODS 3 (3.1, 3.2, 3.3, 3.4), ODS 4 (4.7), ODS 5 (5.5), ODS 6 (6.3), ODS 8 (8.8), ODS 10 (10.3), ODS 12 (12.4, 12.5), ODS 13 (13.3), ODS 16 (16.1).

2. Learning results

- Correct use of medical terminology specific to this subject.
- Know and understand the pathogenic mechanisms that lead to the functional failure of an organ, system or apparatus, and the disturbances that occur in the organism and that give rise to the symptoms and clinical syndromes of the diseases resulting from these alterations.
- To be able to take biological samples and choose the basic and complementary laboratory techniques that allow their evaluation, as well as to interpret their results in order to detect the corresponding biopathological alterations.
- To know and correctly apply the methods and procedures of clinical examination of the different organs and apparatus in domestic animals and be able to interpret the results derived from such examination.
- To be able to prepare and/or interpret a clinical history in the main species of domestic animals.

3. Syllabus

THEORETICAL CLASSES

MODULE I: Pathophysiology, biopathology and exploration of the digestive system.

Topic 1 -- Pathophysiology and examination of the mouth, pharynx and salivary glands.

Topic 2 - Pathophysiology of the esophagus and stomach: dysphagia and regurgitation.

Item 3 -- Vomiting syndrome I

Topic 4 - Vomiting syndrome II.

Topic 5 - Pathophysiology of the intestine: Ileo. Constipation. Diarrheic syndrome. Malabsorption syndrome.

Topic 6 - Pathophysiology, biopathology and exploration of the liver and biliary tract. Alterations of the biliary, vascular, metabolic and detoxifying functions. Serum enzymes and functional tests.

Topic 7 - Pathophysiology, biopathology and exploration of the exocrine pancreas: Acute pancreatitis. Exocrine pancreatic insufficiency.

Topic 8 - Physiopathology, biopathology and exploration of the stomach of ruminants I. Indigestions.

Topic 9 - Pathophysiology, biopathology and exploration of the ruminant stomach II. Indigestion.

Topic 10 -- Pathophysiology, biopathology and exploration of the ruminant stomach III. Indigestion.

Topic 11 - Pathophysiology of the digestive tract in equids. Colic syndrome. Endotoxemias.

MODULE II: Pathophysiology, biopathology and exploration of the genitourinary system.

Topic 12 - Pathophysiology of diuresis: polyuria/polydipsia syndrome, oliguria, anuria and urinary incontinence.

Topic 13 - Renal failure: etiology and pathogenesis.

Topic 14 - Glomerulopathies.

Topic 15 - Tubular syndromes and interstitial nephropathy.

Topic 16 - Exploration and biopathology of the urinary system.

Topic 17 - Exploration of the genital apparatus of the male.

Topic 18 - Exploration of the genital apparatus of the female.

Topic 19 - Exploration of the breast.

MODULE III: Pathophysiology, biopathology and exploration of the endocrine and nervous systems.

Topic 20 - Pathophysiology, biopathology and exploration of the hypothalamic-pituitary axis: alterations in the secretion of somatotropin and antidiuretic hormone.

Topic 21 - Pathophysiology, biopathology and exploration of the adrenal glands: hyper- and hypoadrenocorticism.

Topic 22 - Pathophysiology, biopathology and thyroid and parathyroid exploration: hyper and hypofunction.
Topic 23 -- Pathophysiology, biopathology and exploration of the endocrine pancreas: hyper- and hypoinsulinism.
Topic 24 - Pathophysiology and biopathology of adaptation and pain.
Topic 25 - Examination of the nervous system: identification of neurological signs and localization of the lesion.
Topic 26 - Physiopathology of the brain: etiopathogenesis of processes affecting the brain.
Topic 27 - Pathophysiology of the spinal cord: etiopathogenesis of processes affecting the spinal cord.
Item 28 - Exploration of the musculoskeletal system.
Topic 29 - Exploration of the eye.
Topic 30 - Exploration of the ear.

PRACTICAL CLASSES

1. Examination of the dog abdomen.
2. Examination of the equine abdomen.
3. Digestive examination of ruminants and rumen fluid analysis.
4. Genitourinary and breast examination.
5. Urine collection and analysis.
6. Examination of the nervous and musculoskeletal system.
7. Exploration of the senses.
8. Valuation of the farm and collectivities.
9. Applied equine exploration.
10. Exploration applied to dogs.
11. Exploration applied to ruminants.

SEMINARS

- A. Digestive biopathology.
- B. Renal biopathology.
- C. Endocrine biopathology.
- D. Biopathology in large animals.

4. Academic activities

- Theoretical classes: The theoretical contents of the subject will be covered in 30 lectures of 50 minutes duration, with students divided into two groups.

- Practical classes: There will be a total of 22 hours of practice with animals or in the laboratories, distributed into 11 sessions of 1.5 to 3 hours of duration, in groups of 6-8 students.

- Seminars on clinical cases and practical cases: Seminars of clinical cases and practical cases: these are sessions for the resolution of practical cases proposed by the teacher in which there will be a guided sharing and discussion. They include a total of 8 hours distributed into 4 sessions

-Study and personal work: 82 hours

-Tutoring: 2 hours

Assessment tests. 6 hours

5. Assessment system

- 1 Face-to-face system, with the following evaluation activities:
 - 1.a. In the exploration practices, the skills in handling and exploration of animals of different species will be evaluated (Maximum total grade in this section 24 points, a minimum of 15 is required to pass).
 - 1.b. In the laboratory practices a report completed by the students in each of the sessions will be evaluated (maximum total score in this section 12 points, a minimum of 7 is required to pass).
 - 1.c. Final written test for the evaluation of the contents of the theoretical classes and seminars. It will consist of 32 short questions with a maximum grade of 2 points. A minimum of 35 points must be obtained to pass.
- 2. Global test, for students who are not integrated in the face-to-face system, which includes three sections:
 - 2.a. Practical exploration test on one or several animal species. The same assessment criteria will be applied as in the classroom system.
 - 2.b. Practical laboratory test: one or more practical exercises on the contents of these practices. (Maximum grade 12 points, minimum of 7 to pass).
 - 2.c. Written test. Same modality and evaluation criteria as in the face-to-face system.

In order to pass the subject, each of the three modules must be passed separately and the final grade for passing students will be calculated by applying the formula:

Final grade = $0.116279 \times \text{Total grade obtained} - 1.6279$