

Animal Health III

Code: 102613
ECTS Credits: 5

Degree	Type	Year	Semester
2502445 Veterinary Medicine	OB	4	1

Contact

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Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: Yes
Some groups entirely in Spanish: No

Teachers

Joaquín Castellà Espuny
Margarita Martín Castillo
Enrique María Mateu de Antonio
Laila Darwich Soliva
Ana Maria Ortuño Romero

Prerequisites

There are no prerequisites. However, it is recommended to review the contents of the subjects of Animal Health I and II, Microbiology, Microbiology and applications, Parasitology, and Epidemiology and Statistics.

Objectives and Contextualisation

Animal Health III is a first-semester subject of the fourth year of the Veterinary Medicine Degree. Animal Health III is part of the subject of Animal Health that comprises four courses. In this subject the infectious and parasitic diseases of dogs and cats, rabbits and pigs are taught.

The training objectives are:

- To understand the basic concepts and methodology used in the study of infectious and parasitic diseases.
- To understand the pathogenesis of the most important infectious and parasitic diseases of domestic animals and relate it to the most characteristic clinical signs and injuries.
- To make differential diagnoses based on the epidemiology, signs and observable lesions in animals.
- To apply and interpret the most common laboratory techniques in the framework of infectious and parasitic diseases.
- To prepare a diagnosis and a pattern of action before a case or outbreak of infectious-contagious disease.

Competences

- Analyse, synthesise and resolve problems and make decisions.
- Apply scientific method to professional practice, including medicine
- 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.

Learning Outcomes

1. Analyse, synthesise and resolve problems and make decisions.
2. Apply and interpret the commonest laboratory techniques to diagnose and prevent infectious and parasitological diseases in domestic animals and other useful species.
3. Apply scientific method to professional practice, including medicine
4. Define the basic concepts and methodology used in the study of animal health.
5. Demonstrate knowledge of English to communicate both orally and in writing in academic and professional contexts.
6. Distinguish the main parasitological diseases that affect domestic and useful animals.
7. Evaluate the importance and appropriateness of necropsy as a method for diagnosing disease.
8. Evaluate the importance of infectious and parasitological diseases in the field of animal health, public health and animal productions.
9. Identify the characteristic lesions of diseases in domestic and wild species.
10. Perform differential diagnoses on the basis of epidemiology, clinical signals and observable injuries in animals.
11. Produce action guidelines for a case or outbreak of an infectious-contagious disease.
12. Properly apply anatomopathological nomenclature and use suitable terminology in the field of infectious and contagious diseases.
13. Recognise the pathogeny of diseases in domestic animals, and establish suitable associations between lesions, etiology and clinical signals.

Content

In this subject, the main diseases of infectious and parasitic origin of dogs, cats, rabbits and pigs will be studied. This (etiology, pathogenesis, type of clinical presentation, diagnosis, control and prevention. In those of parasitic origin, parasitic-host relationships are also considered and the recognition and identification of responsible parasites). On the other hand, the economic and sanitary importance of the different diseases studied is also considered.

PROGRAM

Dogs, cats and rabbits (24 h)

Dogs

- Respiratory diseases: Respiratory canine complex (coughs of the kennels). Dirofilariosis.
- Systemic diseases: Brom. Contagious canine hepatitis.
- Digestive diseases: Parvovirus. Coccidiosis, giardiasis.
- Diseases transmitted by vectors: Leishmaniasis. Ehrlichiosis.
- Reproductive processes: Herpesvirus. Neosporosis
- Skin or mucocutaneous diseases: Mange. Pyoderma.
- Helminthiasis. Toxocariosis

Cats

- Respiratory diseases: Introduction. Feline respiratory complex.
- Digestive diseases: Feline Panleukopenia. Diarrhea for protozoa
- Systemic diseases: Feline infectious peritonitis. Retroviral infections (leukemia-immunodeficiency)
- Diseases of the skin: Notohedral scabies. Ringworm.
- Helminthiasis. Dipylidiosis.
- Health programs in dogs and cats. Vaccination and deworming/deparasitation programs.

Seminar: Health programs in dogs and feline colonies

Special Seminar: Discussion of clinical cases

Rabbits

- Parasitic diseases: Introduction. Encephalitozoonosis. Coccidiosis. Helminthiasis digestive.
- Infectious processes: Introduction. Pasteurellosis. Mixomatosis. Haemorrhagic-viral disease. Enzootic enteropathy. Muroid enteritis
- Health programs in rabbits. Vaccination and deworming programs.

Pigs (19 h)

- Digestive diseases: Introduction- Differential diagnoses. Neonatal diarrhea. Digestive complex of fattening pigs. Coccidiosis
- Respiratory diseases: Introduction - Differential diagnoses. Respiratory pig disease complex. Swine influenza
- Systemic diseases: Introductory scheme - differential diagnosis. Swine respiratory and reproductive syndrome. Pig Circovirus
- Reproductive processes: Introduction - Differential diagnoses. Porcine parvovirus
- Neurological diseases - Introduction - Differential diagnoses. Bacterial meningitis other infections
- Cutaneous processes: Introduction - Differential diagnoses.
- Arthropodosis and helminthiasis
- Health, vaccination and deworming/deparasitation programs

Seminar: presentation and discussion of clinical cases

Methodology

The center of the learning process is the work of the student. The student learns working, being the mission of the teaching staff to help him / her in this task (1) providing information or showing the sources where it can be obtained and (2) directing his / her steps so that the learning process can be done effectively. In line with these ideas, and in accordance with the objectives of the subject, the development of the course is based on the following activities. Some activities may be imparted in English.

1. Master classes:

The student acquires the own knowledge of the subject attending the master classes and complementing them with the personal study of the topics explained. The master classes are conceived as a fundamentally unidirectional method of transmitting knowledge from the teacher to the student.

2. Seminars:

The seminars are sessions with a dual purpose. On the one hand work knowledge that has not been exposed in a deeper way in the master classes, to complete their understanding, and on another to discuss the results obtained in the works entrusted. One of the seminars (SESP) will be devoted to the discussion of clinical cases and their resolution by the students summoned.

3. Tutorials:

The tutorials allow to establish a direct dialogue between student and teacher which emphasizes the orientation and motivation of the first, especially in relation to self-learning.

4. Self-learning:

Part of the theoretical contents are exposed through the resolution of problems or clinical cases ("problem based learning") that the student must develop. The student is provided with the objectives and the means to achieve them, so that the student establishes to a certain extent their learning rhythm in the resolution of problems and clinical cases.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Master classes	40	1.6	1, 12, 3, 2, 4, 5, 6, 11, 10, 9, 13, 7, 8
Seminars	3	0.12	1, 3, 2, 11, 10
Type: Supervised			
Tutorials	3	0.12	1, 12, 4, 6, 9, 13, 8
Type: Autonomous			
Autonommous study	56	2.24	1, 12, 2, 4, 6, 11, 10, 9, 13, 7, 8
Self-learning	20	0.8	1, 12, 3, 2, 4, 6, 11, 10, 9, 13, 7, 8

Assessment

The assessment will be individual and will be carried out according to the different training activities that have been programmed. It will be organized by evaluating each one of the blocks that integrate the subject. The written exam may include questions in English that will be optional (bonus) and will be related to activities in this language. Students who respond correctly to these questions may have up to 5% bonus on the exam's grade. To pass the subject, the minimum score required in each block must be obtained in the manner specified below:

1- BLOCK 1 (dogs, cats and rabbits):

The grade is based on the written exam (80%) and the analysis of a clinical case (20%). The evaluation of the clinical case will be based on the quality of the presentation and the knowledge demonstrated at the turn of questions.

It is an indispensable requirement for passing the block to have a mark >50% of the maximum score. Theory and cases average from 40%.

2- BLOCK 2 (pigs)

The qualification is based on a clinical case (20%) and the written exam (80%). It is an indispensable requirement for passing the block to have a mark >50% of the maximum score. Theory and cases average from 40%.

The final mark of Sanitat Animal III will be established as a weighted average between the two blocks that make up it. The student must pass the two blocks of contents to pass the subject although compensation is possible with a partial mark of 40% or higher. If the student fails the partial exams there will be an additional exam at the end of the semester.

The presentation to any of the scheduled exams implies that the student will receive a qualification in the minutes. Only the student who does not take a test will be considered "Not qualificable".

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Cases in small animal diseases	20	0	0	1, 12, 3, 2, 4, 5, 6, 11, 10, 9, 13, 7, 8
Examination about the diseases of pigs	45	1.5	0.06	1, 12, 3, 2, 4, 6, 11, 10, 9, 13, 7, 8
Examination on the diseases of dogs, cats and rabbits	55	1.5	0.06	1, 12, 3, 2, 4, 6, 11, 10, 9, 13, 7, 8

Bibliography

- Greene, C.E. (2012). Infectious diseases of the dog and cat. 4a. ed. Saunders (W.B.) Co Ltd, Philadelphia. ISBN: 978-1-4160-6130-4
- Gutierrez J., Ortuño A., Castellà J. (2006) Parasitologia Clínica: Parasitosis digestivas del perro y del gato. Multimèdica Ediciones Veterinarias.
- Varga M..Textbook of Rabbit Medicine (Second Edition), 2014, Pages 435-471. Chapter 14 - Infectious Diseases of Domestic Rabbits: <http://www.sciencedirect.com/science/book/9780702049798>
- Zimmermann, J.J., Karriker L., Ramirez A. , Schwartz K., Stevenson G. (2012). Diseases of swine. (10a ed.). Iowa State University Press, Wiley-Blackwell. ISBN: 978-0-8138-2267-9

Altres fonts de consulta:

Bloc 1: Malalties de gossos i gats

- Bowman D.D., Hendrix C.M., Lindsay D.S., Barr S.C. (2002) Feline Clinical Parasitology. Iowa State University Press.
- Hartmann, K., Levy, J.K. Feline Infectious Diseases. Self-Assessment Color Review (2011). Manson Publishing/The Veterinary Press. ISBN: 978-1-84076-099-6
- Urquhart G.M., Armour J.A., Duncan J.L. (1998). Veterinary Parasitology. Blackwell Science.
- Gutierrez JF., Ortuño A., Castellà J. (2006). Parasitologia Clínica: Parasitosis digestivas del perro y del gato Multimèdica Ediciones Veterinarias.
- Feline infectious diseases: Self-assessment colour review. CRC ISBN 9781840760996

Webs d'interès:

- European Advisory Board on Cat Diseases (ABCD) Guidelines: <http://www.abcd-vets.org/Pages/Home.aspx>

- Current Topics in Canine and Feline Infectious Diseases (Nov. 2010):

<http://www.sciencedirect.com/science/journal/01955616/40>

- Emerging and Reemerging Viruses in Dogs and Cats (July 2008):

<http://www.sciencedirect.com/science/journal/01955616/38/4>

- A Concise Guide to Infectious and Parasitic Diseases of Dogs and Cats, Carter et al. (2005):

http://www.ivis.org/special_books/carter/toc.asp

- WSAVA Vaccination Guidelines Group: <http://www.wsava.org/guidelines/vaccination-guidelines>

Malalties de conills:

- Harcourt-Brown, F. (2002) Textbook of Rabbit Medicine. Capítol 16. Elsevier Ltd. ISBN: 978-0-7506-4002-2: <http://www.sciencedirect.com/science/book/9780750640022>

- Rosell J.M. (coordinador) (2000). Enfermedades del conejo. Vols. I i II. Ediciones Mundiprensa. Madrid.

Web sobre cunicultura: <http://www.conejos-info.com/>

Bloc 2: Malalties de porcs:

- Jackson, P.G.G., Cockcroft, P.D. (2007). Handbook of Pig Medicine. Elsevier Ltd. ISBN: 978-0-7020-2828-1: <http://www.sciencedirect.com/science/book/9780702028281>

- Segalés, J., Martínez, J. (coordinadores). Manual de diagnóstico laboratorial porcino (2013). Servet Editorial-Grupo Asís Biomedica S.L. ISBN: 978-84-941014-0-3

Webs d'interès:

- ThePigSite Quick Disease Guide: <http://www.thepigsite.com/diseaseinfo/>

- 3tres3 La página del cerdo: <http://www.3tres3.com/>

- European Association of Porcine Health Management: <http://www.eaphm.org/>

- American Association of Swine Veterinarians: <http://www.aasv.org/links.php>

Altres fonts d'informació per estudiar la matèria de Sanitat Animal:

- Oficina Mundial de Sanitat Animal: <http://www.oie.int>

- Center for Food Security & Public Health (CFSPH): Animal Disease Information: <http://www.cfsph.iastate.edu/DiseaseInfo>

- Maclachlan, N.J., Dubovi E.J. (editors). Fenner's Veterinary Virology (2011) 4a. ed., Elsevier Inc. ISBN: 978-0-12-375158-4: <http://www.sciencedirect.com/science/book/9780123751584>

- Manual Merck de Veterinària: <http://www.merckmanuals.com/vet/index.html>

Cal consultar la programació general del curs a la pàgina web de la Facultat de Veterinària (<http://www.uab.cat/veterinaria/>).

Cal consultar l'espai docent de l'assignatura a la plataforma Veterinària Virtual (<http://veterinariavirtual.uab.es/web/vetvir/vetvir.htm>) o al Campus Virtual de l'assignatura.

