

General information	
Academic subject	Pathological anatomy 1
Degree course	Veterinary Medicine
Academic Year	2021/2022
European Credit Transfer and Accumulation System (ECTS)	3
Language	Italian
Academic calendar (starting and ending date)	IV Bimester
Attendance	Madatory

Professor/ Lecturer	
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Department and address	Veterinary Medicine Campus – Valenzano (BA)
Virtual headquarters	Code team b0nj9a8
Tutoring (time and day)	Monday 14.30-16.30 Tuesday 14.30-16-30 Thursday 14.30-16.30 Friday 10.30-12.30

Syllabus	
Learning Objectives	<p>The course aims to:</p> <ol style="list-style-type: none"> 1. Provide the student knowledge on the anatom-histopathological alterations of the different organs 2. Provide the recognition of macroscopic and microscopic anatom-histopathological lesions of the treated devices 3. Use an accurate and appropriate terminology. 4. Understand the cause of organ lesions, correlating them with their pathogenesis and the most common diseases in pets 5. Learn the methods of withdrawal of organ samples for histopathological examinations and bacteriological, parasitologic, virological, toxicological and serological side researches. 6. Enhancing the importance of matter within the degree course in veterinary medicine. 7. Acquire learning capacity, adaptation, analysis, synthesis and planning in order to apply the knowledge acquired to the practical problem solving. 8. Be able to work independently and in multidisciplinary teams to promote the use of existing sources of information. 9. Getting closer to the realities of the profession and enhance the interdisciplinary vision of the problems that will face.
Course prerequisites	<ol style="list-style-type: none"> 1. Knowledge of the contents of Parasitology Infectious diseases 1 Infectious diseases 2. for understanding the concepts of teaching Pathological Anatomy
Contents	<p>Respiratory system: lesson 1: Post-mortal and ontogenetic alterations, metabolic alterations, circulatory alterations, lesson 2: inflammatory processes, Lesson 3: parasitic lesions, neoplasms Cardio-circulatory system. Lesson 1: Post-mortal and ontogenetic alterations, metabolic alterations, circulatory alterations, lesson 2: inflammatory processes, lesson 3: parasitic exions, neoplasms. Blood and lymphatic system. Bone marrow: lesson 1: aplasia, gelatinous atrophy, hyperplasia, pigmentation, necrosis, hemosiderosis. Lesson 2: Anemias: Myelo and lymphopoietic disorders.</p>

	<p>Thymus: Lesson 1: primary and secondary immunodeficiencies, physiological and pathological involution, circulatory disorders, inflammatory processes. Tumors.</p> <p>Lymph nodes: Lesson 1 Post-mortal and ontogenetic alterations, metabolic alterations, circulatory alterations, Lesson 2: inflammatory processes, parasitic lesions, neoplasms.</p> <p>Spleen: Lesson 1 Post-mortal and ontogenetic alterations, metabolic alterations, circulatory alterations, Lesson 2: inflammatory processes, parasitic lesions, neoplasms.</p> <p>Muscular system. Lesson 1: Post-mortal and ontogenetic alterations, metabolic alterations, circulatory alterations, Lesson 2: inflammatory processes, parasitic lesions, neoplasms.</p> <p>Bones Lesson 1: Post-mortal and ontogenetic alterations, metabolic alterations, circulatory alterations, Lesson 2: inflammatory processes, parasitic lesions, neoplasms.</p> <p>Joints. Lesson 1: Post-mortal and ontogenetic alterations, metabolic alterations, circulatory alterations, inflammatory processes, parasitic lesions, neoplasms.</p> <p>Endocrine system</p> <p>Lesson 1 Pathologies of the pituitary and parathyroid glands; Thyroid disorders (circulation disorders, thyroiditis, goiters, neoplasms); Lesson 2: Pathologies of the adrenal glands (degeneration of the adrenal cortex, inflammation, hypoadrenocorticism, hyperadrenocorticism, neoplasms); Diabetes mellitus.</p>
Books and bibliography	<ol style="list-style-type: none"> 1) P.S. Marcato: Patologia sistematica veterinaria. Edagricole, Milano 2015. 2) M.D. McGavin, J.F. Zachary: Systematic veterinary pathology. Elsevier, 2010 3) Guarda F., Mandelli G.: Trattato di anatomia patologica veterinaria, IV Edizione. UTET
Additional materials	Color Atlas of Veterinary Pathology-General morphological reactions of organs and tissues. II Edition Van Dijk. J. E.; Gruys, E.; & Mouwen, J.

Work schedule			
Total	Lectures	Hands on (Laboratory, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
Hours			
75	26	25	24
ECTS			
3	2	1	
Teaching strategy	<p>The lessons will take place in the fourth two-month period (May-June), carried out both theoretically with the active involvement of the student, through multimedia (powerpoint slides) and audiovisual means that show the lesions under study. Both practically, under the supervision of the teacher, after having put in place the hygiene, health and biosecurity measures provided, dividing the students into small groups.</p> <p>The lessons will take place in the fourth two-month period (May-June), carried out both theoretically with the active involvement of the student, through multimedia (powerpoint slides) and audiovisual means showing the lesions under study. It is practically, under the supervision of the teacher, after having put in place the sanitary and biosecurity measures, dividing the students into small groups. The exercises will be carried out: in the histopathology laboratories of the section of Comparative Pathology and Oncology for the microscopic part; in the necropsy room located in the Vinci Pavilion for the macroscopic part using organs seized from the</p>		

	<p>slaughterhouse or from autopsies carried out in the previous days.</p> <p>At the end of the exercises, each individual student will present a pathological report of the lesions found and collectively they will compare themselves with the other groups. Seminars on specific topics will be provided with internal / external teachers or by students under the supervision of the course teacher. All the activities carried out by the students (study, exercises, seminars, etc.) will have the teacher as a guide. The student will also have the opportunity to attend, through Microsoft Teams or similar platform, the exercises that will take place in the necropsy room of the Vinci Pavilion.</p>
Expected learning outcomes	<p>At the end of the course, students will have acquired both from a theoretical and practical point of view the skills to identify the possible causes of lesions, their pathogenesis, describe and diagnose the pathological lesions affecting the various systems treated in the course, using accurate terminology and appropriate.</p> <p>Furthermore, the students will be able to identify the lesions most easily found in slaughtered animals in the organs, with particular attention to zoonoses and infectious diseases affecting pets and livestock.</p> <p>They will also acquire capabilities:</p> <ul style="list-style-type: none"> • analysis and summary of the pathologies found • of reasoning and argumentation • to work independently and in a team. • to solve problems through the integrated application of their knowledge • to disclose the information acquired
Knowledge and understanding on:	<ul style="list-style-type: none"> ○ The student will have the knowledge and ability to: <ul style="list-style-type: none"> ○ o understanding of the etiology and pathogenesis of organ injuries. ○ o recognize anatomical-histopathological organ lesions by associating them with the cause of the disease. ○ o carry out anatomo-histopathological diagnosis and elaboration of the diagnostic report
Applying knowledge and understanding on:	<ul style="list-style-type: none"> ○ or necropsy techniques ○ or to food inspection ○ or to clinics
Soft skills	<ul style="list-style-type: none"> • Autonomy of judgment <p>At the end of the course, the student must be able to</p> <ul style="list-style-type: none"> ○ have the ability to learn, adapt, analyze, synthesize and plan work ○ or to apply the knowledge acquired ○ o describe the anatomo-histopathological lesions found ○ or to make anatomo-histopathological diagnosis <ul style="list-style-type: none"> • Communication skills <ul style="list-style-type: none"> ○ At the end of the course, the student must be able to ○ Have the ability to reason, argue and present in a clear and coherent way the topics of anatomy-histopathology <ul style="list-style-type: none"> • Ability to learn independently

	<p>At the end of the course, the student must be able to</p> <ul style="list-style-type: none"> ○ Consult texts and publications and extrapolate the contents necessary to address the topic of interest.
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Assessment and feedback	
Methods of assessment	
Evaluation criteria	<ul style="list-style-type: none"> ● Knowledge and understanding <ul style="list-style-type: none"> ○ xxxx ● Applying knowledge and understanding <ul style="list-style-type: none"> ○ xxxxx ● Autonomy of judgment <ul style="list-style-type: none"> ○ xxxx ● Communicating knowledge and understanding <ul style="list-style-type: none"> ○ xxxxxxxxxxxxxxxx ● Communication skills <ul style="list-style-type: none"> ○ xxxxxxxxxxxxxxxx ● Capacities to continue learning <ul style="list-style-type: none"> ○
Criteria for assessment and attribution of the final mark	<p>The assessment of knowledge takes place through a practical preparatory test in the autopsy room completed by an oral test.</p> <p>The practical test focuses on the macroscopic and microscopic recognition of the subjected organ, the determination of the species and the lesion present in it. The description must be made respecting the modalities reported during the course in a clear and as detailed way as possible. The verification of an insufficient level does not allow you to take the next stage of the exam. The oral exam will focus on the various topics of the systems dealt with in class. The final evaluation will be out of thirty; the exam will be considered passed if the grade is greater than or equal to 18. It will be possible to attribute honors to the student who proves to have particular skills, refined exposure and completeness in dealing with the required topics</p> <p>The assessment of knowledge takes place through a preliminary practical test in the autopsy room completed by an oral test.</p> <p>The practical test focuses on the macroscopic and microscopic recognition of the subjected organ, the determination of the species and the lesion present in it. The description must be made respecting the modalities reported during the course in a clear and as detailed way as possible. The verification of an insufficient level does not allow you to take the next stage of the exam. The oral exam will focus on the various topics of the systems covered in class. The final evaluation will be out of thirty; the exam will be considered passed if the grade is greater than or equal to 18. It will be possible to attribute honors to the student who demonstrates that he or she has particular skills, a refined exposure and completeness in dealing with the required topics.</p> <p>The final grade is the weighted average of the marks out of thirty obtained in the tests of "Pathological Anatomy 2-3" and necropsy technique</p>
Additional information	