

General information	
Academic subject	<b>VETERINARY SURGICAL PATHOLOGY</b> (integrated exam of Veterinary Surgery 1)
Degree course	VETERINARY MEDICINE
Academic Year	2021/2022
European Credit Transfer and Accumulation System (ECTS)	4 (ECTS lessons: 3 + ECTS exe/lab/tutor: 1)
Language	Italian
Academic calendar (starting and ending date)	II Bimester
Attendance	Mandatory

Professor/ Lecturer	
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Virtual headquarters	Microsoft Teams cod. 7s2nw6a
Tutoring (time and day)	From Monday to Friday 9:30-16:30 by appointment via e-mail

Syllabus	
<b>Learning Objectives</b>	The course aims to teach the student the main etiopathogenetic mechanisms of diseases of surgical interest by defining the aspects concerning etiology, pathogenesis and possible clinical manifestations. Furthermore, to allow the acquisition of the correct methods of clinical approach and interpretation of the pathological processes of surgical diseases.
<b>Course prerequisites</b>	The prerequisite of the "General Pathology" exam is required. An adequate preparation in Anatomy and Physiology is also necessary to understand the pathological processes and alterations of surgical interest, as well as the knowledge of the principles of Biosecurity in the relationship with animals.
<b>Contents</b>	<p>Clinical Sciences of Companion Animals (including horses and exotics).</p> <p><u>Fundamental pathological processes of tissues</u>: Atrophy, Hypotrophy, Hypertrophy, Dystrophy. Aplasia, Hypoplasia, Hyperplasia, Dysplasia. Anaplasia and Metaplasia. Inflammatory process. Infiltrations. Wounds and bruises. Healing processes. Pathology of scarring. Sore, Ulcer, Keloid. Adherences and Coalescences. Fistulas. Bone repair, Pathology of bone repair, Callus pathology.</p> <p><u>Fundamental pathological processes of the organs</u>: Atresias, Stenosis, Occlusions. Retentions. Collections. Ectasias and diverticula. Ectopias. Paratopias. Trauma and shock. Neoplasias.</p> <p><u>Disorders of bone and bone tissue</u>: Pathophysiology and classification of fractures. Metabolic osteopathies, hypertrophic osteodystrophy, enostosis, osteomyelitis, periostitis and osteoperiostitis. Primary and secondary tumors.</p> <p><u>Diseases of the joints and the epiphyseal disc</u>: Dysplasia, Osteochondrosis and osteochondritis dissecans. Arthrosis. Dislocation and sub-dislocation. Ankylosis. Retained cartilage core. Varus and valgus.</p> <p><u>Diseases of muscles, tendons and ligaments</u>: Myositis, Tendinitis and desmitis, Synovitis, Bursitis.</p> <p><u>Nervous system disorders</u>: Paralysis, paresis and pathologies of the spinal cord.</p>

	<p>Discopathies, Wobbler's Syndrome, Cauda equina Syndrome. Vertebral osteomyelitis and discospondylitis.</p> <p><u>Diseases of the digestive system</u>: Megaesophagus, Pathophysiology of gastric dilatation-torsion syndrome, Pathophysiology of intestinal obstruction, Dislocations, Anorectal diseases.</p> <p><u>Respiratory system disorders</u>: Respiratory tract syndrome of the brachycephalic breeds, Paralysis and collapse of the larynx, Pneumothorax.</p>
<b>Books and bibliography</b>	<p>Bojrab J. B.: "Le basi patogenetiche delle malattie chirurgiche nei piccoli animali", I edizione italiana, Giraldi Editore, 2001.</p> <p>Tobias K.M., Johnston S.A.: Chirurgia Veterinaria dei Piccoli Animali, II ed., Delfino Editore, 2020.</p> <p>Fossum T.W.: Chirurgia dei piccoli animali, Elsevier-Masson, III o IV edizione italiana, 2008 e 2013.</p> <p>Slatter D.: Trattato di Chirurgia dei Piccoli Animali, III ed., Delfino Editore, 2016.</p> <p>Micheletto B.: "Patologia Chirurgica Veterinaria e Podologia", UTET.</p> <p>Rose R.J., Hodgson D.R.: Manuale di clinica del cavallo, II edizione italiana, Delfino editore, 2005.</p> <p>Stashak T.S.: Adams' La zoppicatura dei cavalli, Edizione italiana della IV americana, Noceto sbm, 1990.</p>
<b>Additional materials</b>	<p>The books are recommended for the purpose of deepening and integration; given the compulsory attendance, the lecture notes and the material provided by the teacher during the course will be of fundamental importance.</p>

<b>Work schedule</b>			
Total	Lectures	Hands on (Laboratory, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
<b>Hours</b>			
100	39	25	36
<b>ECTS</b>			
4	3	1	
<b>Teaching strategy</b>	<p>Lectures will be held in a classrooms provided with multimedia resources including laptops, projector, internet connection, in order to show, at the same time as the explanation, power point slides, photos and explanatory videos. The practical activities take place at the Didactic University Veterinary Hospital on clinical cases that come to observation. The students, divided into groups, are followed by the teacher and collaborators in the practical activities. Each student has the opportunity to face, under the guidance of the teacher, the clinical process of the individual case and discuss the pathophysiological case history with the teacher and/or his collaborators.</p> <p>There is no provision for teaching in e-learning mode.</p>		
<b>Expected learning outcomes</b>			
<b>Knowledge and understanding on:</b>	<ul style="list-style-type: none"> <li>○ Knowledge of the etiological and pathogenetic mechanisms of the pathologies of surgical interest;</li> <li>○ Knowledge of the pathophysiological mechanisms and clinical manifestations of the pathologies of surgical interest;</li> <li>○ Knowledge of the clinical methodology of approach that allows to evaluate the different clinical manifestations of the pathologies of surgical interest;</li> <li>○ Knowledge of the correct technical-scientific terminology for the description and understanding of pathologies of surgical interest.</li> </ul>		

<p><b>Applying knowledge and understanding on:</b></p>	<ul style="list-style-type: none"> <li>○ Ability to use the knowledge acquired in order to recognize, understand and interpret the various clinical manifestations and be able to critically evaluate the evolution of surgical diseases;</li> <li>○ Ability to detect, annotate, describe, analyze and communicate the clinical manifestations of a pathological event of surgical interest;</li> <li>○ Ability to adopt the most suitable procedure to get from the clinical manifestation to the pathophysiological framework and diagnosis.</li> </ul> <p>In accordance with the Day One Competences adopted by the ECCVT, the student must be able to:</p> <ul style="list-style-type: none"> <li>○ Communicate effectively with clients, the public, professional colleagues and responsible authorities, using language appropriate to the audience concerned (1.4);</li> <li>○ Prepare accurate clinical and client records, and case reports when necessary, in a form satisfactory to colleagues and understandable by the public (1.5);</li> <li>○ Work effectively as a member of a multi-disciplinary team in the delivery of services (1.6);</li> <li>○ Understand and apply principles of clinical governance, and practise evidence-based veterinary medicine (1.9);</li> <li>○ Obtain an accurate and relevant history of the individual animal or animal group, and its/their environment (1.15);</li> <li>○ Perform a complete clinical examination and demonstrate ability in clinical decision-making (1.17).</li> </ul>
<p><b>Soft skills</b></p>	<ul style="list-style-type: none"> <li>● Making informed judgments and choices <ul style="list-style-type: none"> <li>○ Ability to collect information on the clinical case and symptoms, useful for defining the etiopathogenetic evolution of the surgical disease;</li> <li>○ Ability to critically analyze the most appropriate procedures during a diagnostic procedure;</li> <li>○ Ability to discern misleading and ancillary information with respect to data useful for framing the clinical problem.</li> </ul> </li> <li>● Communicating knowledge and understanding <ul style="list-style-type: none"> <li>○ Acquisition of the skills and the correct scientific terminology to be able to correctly expose one's deductions to fellow students and the teacher, to be able to relate later on with professional colleagues and customers;</li> <li>○ Acquisition of the ability to work in a team, adopting adequate communication and interaction strategies.</li> </ul> </li> <li>● Capacities to continue learning <ul style="list-style-type: none"> <li>○ Acquisition of the ability to autonomously improve one's knowledge through further studies and in-depth studies on databases or specialized magazines and books.</li> </ul> </li> </ul> <p>In accordance with the Day One Competences adopted by the ECCVT, the student must be able to:</p> <ul style="list-style-type: none"> <li>○ Understanding of, and competence in, the logical approaches to both scientific and clinical reasoning, the distinction between the two, and the strengths and limitations of each (2.1);</li> <li>○ The aetiology, pathogenesis, clinical signs, diagnosis and treatment of the common diseases and disorders that occur in the common domestic species (2.5);</li> <li>○ The ethical framework within which veterinary surgeons should work, including important ethical theories that inform decision-making in professional and animal welfare-related ethics (2.12).</li> </ul>

<b>Assessment and feedback</b>	
Methods of assessment	<p>The knowledge and skills acquired will be assessed through an oral final exam that will verify the acquisition of the required knowledge as detailed in the course objectives.</p> <p>The evaluation acquired in the "Veterinary Surgical Pathology" module, together with that acquired in the "Surgical Semeiotics" and "Radiology" modules, will contribute to the determination of the final evaluation of the integrated examination of Veterinary Surgery 1. The student can take the examination of the three courses that make up the exam integrated in the same session, or first take a partial exam of "Veterinary surgical pathology" and then a final exam of "Surgical semeiotics" and "Radiology" together.</p>
Evaluation criteria	<ul style="list-style-type: none"> <li>• Knowledge and understanding <ul style="list-style-type: none"> <li>○ The student must demonstrate that he has acquired in an organic and thorough way the knowledge of the fundamental etiopathogenetic and pathophysiological processes of surgical diseases;</li> </ul> </li> <li>• Applying knowledge and understanding <ul style="list-style-type: none"> <li>○ The student must demonstrate that he has acquired an adequate ability to correctly recognize, describe and classify the main pathologies of surgical interest, together with the ability to correctly expose the contents;</li> </ul> </li> <li>• Autonomy of judgment <ul style="list-style-type: none"> <li>○ The student must demonstrate analytical skills and a critical sense with respect to the topics studied;</li> </ul> </li> <li>• Communicating knowledge and understanding <ul style="list-style-type: none"> <li>○ The student must demonstrate good ability to present the topics studied and be able to use the specialized scientific terminology appropriately;</li> </ul> </li> <li>• Communication skills <ul style="list-style-type: none"> <li>○ Knowing how to appropriately use the specific terminology useful for interacting within a work group;</li> </ul> </li> <li>• Capacities to continue learning <ul style="list-style-type: none"> <li>○ To be able to rework the concepts learned to adapt them to new situations and to be able to draw on the sources available for their management.</li> </ul> </li> </ul>
Criteria for assessment and attribution of the final mark	<p>The assessment of the learning achieved takes place through an oral interview aimed at ascertaining the degree of knowledge of the proposed topics. The final grade is awarded out of thirty. The exam is passed when the grade is greater than or equal to 18. The final grade of the integrated exam is the result of the weighted average of the marks obtained for each of the three courses. In any case, the student must acquire a mark greater than or equal to 18/30 for each part of the exam relating to the three courses.</p>
<b>Additional information</b>	<p>To access the attribution of the attendance signature and to be able to access the exam, students must attend 75% of the theoretical lessons and 75% of the practical trainings.</p>