

Academic subject: APPLIED CYTOPATHOLOGY AND HISTOPATHOLOGY			
Degree Class: L38		Degree Course: Animal Science	
		Academic Year: 2020/2021	
		Kind of class: optional	
		Year: III	Period: Second semester
		ECTS: 2 divided into ECTS lessons: 1 ECTS exe/lab/tutor: 1	
Time management, hours, in-class study hours, out-of-class study hours lesson: 10 exe/lab/tutor: 25 in-class study: 0 out-of-class study: 15			
Language: Italian		Compulsory Attendance: no	
Subject Teacher: Antonella Perillo		Tel: +39 0805443929 e-mail: antonella.perillo@uniba.it	
		Office: Department of Veterinary Medicine Room Floor	
		Office days and hours: Tuesday :10.00 am-1 pm Wednesday: 2.00-4.00 pm Thursday: 10.00 am-1.00 pm	
Prerequisites: Biosecurity and health management Ethological basis of animal learning.			
Educational objectives: The course aims to provide theoretical and practical knowledge on the most common diagnostic techniques used in pathological cytology and histology and to present the most significant alterations through the observation of the main alterative pictures of neoplastic and non-neoplastic pathologies of companion animals, in such a way that the student acquires precise skills in the performance of a service activity in the Pathological Anatomy laboratories and in the organization of the laboratory, from the receipt of the sample to its reporting, from the practical methods of preparing a cytological and histological preparation to the interpretation, description and microscopic diagnosis of histological and cytopathological samples.			
Expected learning outcomes (according to Dublin Descriptors)		<p>Knowledge and understanding: The student will acquire theoretical and practical knowledge on the use and implementation of cytology and pathological histology methods and critical reading and interpretation skills of the prepared preparations in both the cytological and histopathological fields through observation of the preparations themselves. Furthermore, he will be able to apply the methods of sampling, preparation and staining of samples and to know the interpretative principles and the fundamental elements that allow him to correctly read the preparations in view of an easy formulation of the diagnostic judgment.</p> <p>Applying knowledge and understanding: The student will acquire the necessary main cytological and histopathological skills, which will prepare him for the correct analysis, critical reading and personal interpretation necessary above all in the examination of cases or 'new' aspects.</p> <p>Making judgements: The student will be guided to the exact evaluation of the samples subjected to reading, stimulated in the identification of cell types and trained in the elaboration of hypotheses useful for the solution of the various clinical problems that will be presented to him in the course of study and that he will find himself facing in the future professional activity.</p> <p>Communication: The students will need to make a critical critical reading and personal interpretation necessary above all in the examination of cases or 'new' aspects.</p>	

Lifelong learning skills:

Students will have to demonstrate the ability to learn the main aspects of cytology and pathological histology through the application of techniques and methods of preparation and observation of the preparations.

Course program

Indications, aims and limits of cytopathological diagnostics in veterinary practice. Collection methods and preparation techniques of cytological and histological preparations. Staining techniques of cytological and histological preparations. General criteria for reading and interpreting a cytological and histological preparation. Cell morphology in cytological preparations. The microscopic examination of the preparations. Recognition of the cell types present. Recognition of artifacts. Recognition of the ongoing pathological process. Basic cytology and histopathology of inflammatory processes (acute, chronic or granulomatous inflammation; identification and recognition of pathogens). Basic cytology of neoplasms. Histopathology of neoplastic processes. Cytological criteria of malignancy. Cytological classification of neoplasms. Epithelial, mesenchymal and round cell neoplasms. Cytological diagnosis of skin diseases, lymphadenopathies and cavity effusions. Histological diagnosis of the main changes in companion animals.

Teaching methods:

Lectures and practical exercises.

Auxiliary teaching:

Coat, masks, gloves, cap.

Assessment methods:

Self-assessment test; Practice test. The final test will define the exam of " Technical activities in veterinary facilities" together with the test of Management techniques of animals in veterinary facilities

Bibliography:

P. S. Marcato, Anatomia e Istologia Patologica Generale Veterinaria, Società Editrice Esculapio. A. Poli, A. Ciorba, Citologia del cane e del gatto, Poletto Editore.