

Academic subject: Prophylaxis of wildlife parasitic diseases			
Degree Class: L38	Degree Course: Animal Science	Academic Year: 2020/2021	
	Kind of class: optional	Year: III	Period: II 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 Hours	exe/lab/tutor: 25 Hours	in-class study: 0	out-of-class study: 15 Hours
Language: Italian	Compulsory Attendance: yes		
Subject Teacher: Roberta Iatta	Tel: +39 080 5443839; e-mail: roberta.iatta@uniba.it	Office: Department of Veterinary Medicine, University of Bari “Aldo Moro”, Italy	Office days and hours: Monday and Wednesday From 3:00 pm to 5:00 pm
Prerequisites: “Biosecurity and health management” and “Parasitology, mycology and management of synanthropic animals”			
Educational objectives: The teaching aims to provide knowledge on the main parasites and parasitic diseases, including those of zoonotic concern, and on the preventative measures to carry out for reducing the risk of infection in wildlife including those living in confined spaces (i.e., animals in the zoos or Safari Park), as well as in public health.			
Expected learning outcomes (according to Dublin Descriptors)	<p>Knowledge and understanding: At the end of the course, the student will possess the knowledge on the main parasitic diseases of wildlife, on population dynamics and on the strategies to be adopted for their prevention.</p> <p>Applying knowledge and understanding: The student will be able to apply, when possible, intervention strategies for reducing the risk of infection by endo- and ectoparasites in different species of wild animals focused on the animal welfare and the species conservation. In addition, the preventative measures aim to the reduction of parasitological damage on the meat production in a contest of public health.</p> <p>Making judgements: This teaching will provide to the student knowledge on the main damages caused by a parasitic disease or arthropod infestation in animals species living in an ecosystem and how to treat and reduce them as well as their implication in public health.</p> <p>Communication: The teaching provides specific knowledge and skills on parasitic disease in wildlife. During the teaching and laboratory activities, the active participation of students will be encouraged by presenting data of published articles or case reports through a power point presentation.</p> <p>Lifelong learning skills: The students will apply this knowledge in specific contexts as well as they will be able to deepen them during work-experience or internship activities in given environments such as zoological parks and wild animal rescue centers.</p>		
Course program The topics covered during the course will refer to hints of taxonomy, biology and pathogenesis of parasites as well as the clinical manifestations and the prophylactic interventions to be adopted. In particular, brief introduction on the importance of wildlife, the interaction of the main factors in determining parasitic diseases including those of zoonotic concern and their risk to public health. <i>Leishmania infantum</i> infection in wild and zoo animals. Trichinellosis and echinococcosis. Sarcoptic mange in carnivores and wild ungulates.			

Infestation by ticks and transmitted pathogens.
Tick-borne diseases in wild boars, foxes and passerines.

Teaching methods:

Teaching activities: 1 CFU/ 10 hours; Practical activities: 1 CFU/ 25 hours

The teaching includes theoretical and practical activities. The teaching activities will be held in classrooms equipped with multimedia tools through the projection of power point presentations. Innovative and interactive teachings will be held through online search in specific parasitology websites.

Practical activities will be held in laboratories equipped with specific instruments such as optical microscopes and stereomicroscopes or in autopsy room. Each student will individually perform the practical activities consisting in the identification of ectoparasites by macro- and microscopic examinations and detection of endo- and ectoparasites during a necropsy and performing diagnostic tests. Furthermore, the student will learn how to collect biological specimens and how to store them. The students will join field activities (i.e., wild animal rescue centers).

Auxiliary teaching:

During the laboratory activities, the students will have to wear a personal laboratory coat indicating his name. The biosecurity material necessary for carrying out the practical activities (gloves and masks) will be provided by the staff.

Assessment methods:

The assessment of knowledge takes place through an oral exam on program topics.

The student will have to know the morphological and biological aspects of parasites and the diseases they caused and describe how to prevent and control them. The students have to use the appropriate terminology and able to critically discuss the contents of the subject.

Bibliography:

-Taylor M.A., Coop R., Wall R., "Parassitologia e Malattie Parassitarie degli Animali", Edizione italiana, EMSI, (2009).