

4.00 credits

30.0 h + 7.0 h

Q2

Teacher(s)	Marcotty Tanguy ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	Advised knowledge of the basic notions of immunology and epidemiology to understand the microbiology course
Main themes	<p>The course focuses on the morphology and the biology of protozoan, animal and mycotic parasites of domestic and wild animals from different bioclimatic regions. The course covers all eukaryotic biological groups causing diseases in domestic and wild animals and zoonotic infections. As such, fungi, protozoans, helminths and arthropods are studied.</p> <p>The relationship between the host, the parasite and the environment is emphasized.</p>
Learning outcomes	<p><b>At the end of this learning unit, the student is able to :</b></p> <p>At the end of this activity, the student:</p> <ul style="list-style-type: none"> <li>- Acquired a global view of the different biological groups causing parasitic diseases in wild and domestic animals</li> <li>- Knows the main morphological, biological and epidemiological characteristics of the principal parasites of human and domestic animals</li> <li>- Understands de basic principles contributing to the equilibrium between the parasite and its host</li> <li>- Is able to explain the circumstances in which parasites affect human or animal health</li> <li>- Knows the main zoonotic parasites</li> <li>- Understands how to diagnose the presence of a parasite in humans or animals and how to identify it</li> <li>- Is able to follow the Master 1 course on parasitic diseases of animals.</li> </ul>
Evaluation methods	<p>Students are evaluated through individual oral exams. The interview, which lasts 15 to 20 minutes, is preceded by 30 minutes of preparation. The questions, which cover the whole course, are randomly selected by the students. The evaluation is essentially based on the knowledge of the parasites and the capacity of the student to use parasitological principles in his reflexion.</p> <p>In case of success in the theoretical part above, practical scores account for 20% of the final result. Practical scores are, if applicable, transferable to the next exam session, in the absence of a new evaluation at the end of a practical session.</p>
Teaching methods	<ol style="list-style-type: none"> <li>1. Lectures. Concrete examples are studied in details for each biological group during the lectures and illustrated using audio-visual supports (power-point, photos, videos)</li> <li>2. Practical sessions take place in the laboratory. Theoretical and clinical aspects are reminded in a power-point presentation at the beginning of each session. Each session proposes then a diagnostic part during which the student learns how to isolate and identify parasites and a morphology part during which the student has a chance to observe under the microscope parasites presented during the lectures.</li> </ol>
Content	<ol style="list-style-type: none"> <li>1. Course content: the course is made of 6 parts: a general introduction to parasitology and the used terminology, mycology, protozoology, helminthology, entomology and acarology. The abbreviated systematics, the morphology, the biology, the physiology and some biochemical and immunological aspects of the host-parasite relationship are presented for each parasite group as they are a prerequisite for the study of parasitic and fungal diseases of animals.</li> <li>2. Content of practical sessions: three practical sessions are organised, each of them focusing on a specific theme :                     <ul style="list-style-type: none"> <li>· Arthropods: observation of ticks and diptera; observation of different biological stages of ticks; skin scraping.</li> <li>· Protozoans: observation of smears containing <i>Theileria</i>, <i>Babesia</i>, <i>Leishmania</i> and <i>Trypanosoma</i> parasites at various biological stages; observation and smear of live <i>Trypanosoma theileri</i>.</li> <li>· Helminths : observation of adult worms; coprology using preserved (formaldehyde) stools from different species of domestic animals; observation and identification of eggs of helminths</li> </ul> </li> </ol>
Inline resources	moodle
Bibliography	<ul style="list-style-type: none"> <li>• Foundations of parasitology (Roberts L.S., Janovy J. &amp; Nadler S.)</li> <li>• Georgis' parasitology for veterinarians (Bowman D.D.)</li> <li>• Veterinary parasitology (Taylor M.A., Coop R.L. &amp; Wall R.L.)</li> <li>• Essentials of veterinary bacteriology and mycology (Carter G.R. &amp; Darla J. Wise)</li> </ul>

Other infos	Practical sessions are compulsory and their preparation is evaluated by means of questionnaires. Students presenting inappropriate behaviours during the practical sessions are sanctioned.
Faculty or entity in charge	VETE

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Bachelor in Veterinary Medicine	VETE1BA	4		