

4.00 credits

30.0 h

Q2

Teacher(s)	Van der Eecken Valérie ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	LBIO1111 course must have been completed beforehand (in the same year or a previous year). <i>The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.</i>
Main themes	Essential biochemistry concepts for understanding the functioning of animal cells In-depth study of the functioning of animal cells Concepts of evolution and epigenetics
Learning outcomes	<p>At the end of this learning unit, the student is able to :</p> <p><u>Contribution of the course to the learning outcomes of the Bachelor of Veterinary Medicine programme.</u></p> <p>1 This course contributes to points 1.1.1 and 1.2.4 of the learning outcomes.</p> <p><u>Specific learning outcomes of the course</u></p> <p>2 By the end of this course, students will have an in-depth understanding of the molecules that make up an animal cell and their roles in cell structure and function. They will have acquired the basics for understanding molecular evolution and phylogeny, cell death and the mechanisms of carcinogenesis.</p>
Evaluation methods	Written exam
Teaching methods	Lectures
Content	<p>Elements of biochemistry (7 hours)</p> <ul style="list-style-type: none"> • Protein structure: primary, secondary, tertiary and quaternary structures. • Protein function through examples: extracellular matrix and/or cytoskeletal proteins, antibodies, haemoglobin and enzymes. • Biochemical techniques (assays). <p>In-depth study of animal cell function and concepts of evolution (23 hours)</p> <ul style="list-style-type: none"> • Nuclear organisation, genes, chromatin, transcription, translation; concepts of epigenetics • Molecular evolution (mutations, phylogeny) • Biomembranes: composition, channels, receptors, endocytosis, exocytosis; • Signalling pathways; • Cell death and cancer
Faculty or entity in charge	VETE

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