LVET1295

2016-2017

Biologie cellulaire animale

3.0 credits	22.5 h	2q

Teacher(s) :	Knoops Bernard ; Schneider Yves-Jacques ;
Language :	Français
Place of the course	Louvain-la-Neuve
Prerequisites :	*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.*
Aims :	At the end of the course, the students should be able to : - Describe most aspects of animal cell function (mitosis, protein synthesis, receptors and signaling pathways') - Describe how the neuro-muscular system and the main sensory organs work - Solve simple clinical cases related to those functions - Make link with other courses (anatomy, histology, biochemistry At the end of the course, the students will have a thorough knowledge of: - Animal cell biology (complementary with biochemical courses) Nervous physiology (central and periphery nervous system, sensory organs) and muscle physiology (skeletal and smooth muscles) *The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".*
Evaluation methods :	Oral and written examination
Teaching methods :	Lectures Practical exercises and exercises on neuro-muscular physiology (reflex, nervous pathways, ' in common with the anatomy course (VET1241B)
Content :	Table of Contents : o Animal cell biology : § Nucleus organisation § Transcription and translation § Cytoskeleton and cell motility § Cell cycle § Cell death : necrosis, apoptosis and autophagy § Biomembranes § Cell communication o General physiology § Membrane potential and nerveous cells § Skeletal and smooth muscle function and control § Receptors and sensory pathways § Motor control § Sensory organs The difficulty of the course is related to the complexity of the matter (for example: nervous physiology and signaling pathways) and to the necessity to integrate knowledge from different fields and different courses (physics, anatomy, biochemistry')
Bibliography :	Lehninger PRINCIPLES OF BIOCHEMISTRY », Nelson & mp; Cox, 5ème édition, W.H. Freeman
Faculty or entity in charge:	VETE

Programmes / formations proposant cette unité d'enseignement (UE)

Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Bachelor in Veterinary Medicine	VETE1BA	3	LBIO1111	