UCLouvain

wmds1210

2022

Physiologie cellulaire

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Teacher(s)	Gailly Philippe ;				
Language :	French				
Place of the course	Bruxelles Woluwe				
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.				
Learning outcomes					
Evaluation methods	The student will demonstrate his/her learning outcomes in a written exam: questions with short answer (QSA) and/ or multiple choice (QMC).				
	When QMC are presented, one or more answers are proposed. The student must have all the correct answers to obtain the point. No negative points are counted.				
	When QSA are offered, the student must answer in a structured and concise manner in the space provided for the answer. Care and precision are required (remember to give the units of the values used, etc).				
Teaching methods	The teaching activity consists of a lecture (55 hours) in the auditorium where the different contents are explained by the teacher in charge of the course. Exercises and demonstrations are carried out in the auditorium (TD 10h).				
Content	The teaching is essentially oriented in a physical and physico-chemical perspective: the knowledge acquired in the first year is therefore fundamental. Moreover, physiology is an experimental science: it is from the description of observations that the theories explaining the basic cellular functions are deduced. Finally, special emphasis will be placed on the cellular bases of certain diseases. The practical work is done in large audiences and consists of exercises and demonstrations. Their purpose is to illustrate and explain theoretical concepts. They also introduce the students to the experimental approach and the adequate and precise description of results obtained with simple methods and a critical analysis of the observations.				
Inline resources	Course materials: 3 syllabi (Moodle and/or paper copies)				
Bibliography	Bibliographie de référence recommandée aux étudiants Ouvrages généraux Purves et al. Neurosciences. De Boeck				
	Blaustein, Kao & Matteson : Cellular physiology. Elsevier Mosby				
	Sperelakis: Cell physiology. Academic Press				
	Boron & Boulpaep : Medical physiology. Saunders				
	Flux de matière				
	Glaser : Biophysics. Springer Hille : Ion channels of excitable membranes. Sinauer				
	Schultz : Basic principles of membrane transport. Cambridge University Press				
	Flux d'information et d'énergie				
	Aidley: The physiology of excitable membranes. Cambridge University Press				
	Cowan, Südhof & Stevens : Synapses. Johns Hopkins				
	Kandel, Schwarz & Jessel : Principles of neural science. Appleton & Lange				
	Kayser : Physiologie. Livre deuxième : Système nerveux. Muscle. Flammarion				
	Meunier & Shvaloff : Neurotransmetteurs. Masson Abrégés Tritsch, Chesnoy-Marchais & Felz : Physiologie du neurone. Doin				
Faculty or entity in	MED MED				
charge					

Programmes containing this learning unit (UE)						
Program title	Acronym	Credits	Prerequisite	Learning outcomes		
Bachelor in Medecine	MD1BA	6	WMDS1110	•		