

2.00 credits

15.0 h + 7.5 h

Q1

Teacher(s)	Feron Olivier ;
Language :	French > English-friendly
Place of the course	Bruxelles Woluwe
Prerequisites	<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	Comprehensive outline of the mechanisms regulating cell homeostasis (intra and extracellular buffers, mechanisms of exchange of materials and information between intracellular and intracellular compartments, intercellular communication).
Learning outcomes	At the end of this learning unit, the student is able to : 1 By the end of this course, the students will possess a general knowledge of fundamental concepts in cell physiology, and in particular the principles of cell homeostasis and the interaction of the cell with its environment. In this perspective, the animal cell is considered as a single biological unit participating in the formation of an integrated organism.
Evaluation methods	Multiple-choice questions (MCQ) based among others on schemes.
Teaching methods	Lecture in auditorium + flipped classroom for some parts of the course (= podcasts supplemented by sessions in auditorium to answer students' questions).
Content	The course first addresses the general mechanisms that ensure the maintenance of the internal environment and the exchange of materials with the surrounding environment. The study of intercellular communications then highlights the chemical and electrical means available to the cells for the transmission of the many information essential for the control and regulation of vital functions. Finally, a chapter is devoted to the study of contractile properties and excitation-contraction coupling mechanisms in different types of muscles. For students in the FARM section (Pharmaceutical Sciences), tutorials (in computer room) illustrate and complete the theoretical courses.
Inline resources	Podcasts and ppt files are accessible via Moodle.
Other infos	For FARM students, participation in tutorials and practice sessions is mandatory to validate the teaching unit. Any unjustified deviation from this rule leads to a penalty in the teaching unit (TU) exam which can go as far as the cancellation of the exam mark (0/20). The teacher may also propose to the jury to oppose the registration for the TU exam in compliance with article 72 of the RGEE.
Faculty or entity in charge	FARM

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Bachelor in Pharmacy	FARM1BA	2	WMD1104 AND WMD1120P AND WMD1006	