UCLouvain

wsbim2284

2023

Cellular and molecular pathophysiology of human diseases (Part 2)

3.00 credits	10.0 h + 20.0 h	Q2

Teacher(s)	Andrade Amorim Christiani ;Bertrand Luc ;Corbet Cyril ;Dessy Chantal ;Dumoutier Laure ;Henriet Patrick ;Horman Sandrine ;Jonas Jean-Christophe (coordinator) ;
Language :	English
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.*
Main themes	At the end of the year, the student will : • know the pathophysiology of the diseases covered during classes, from the molecule to the cell, the cell to the organ, and the organ to the organism • understand/be able to explain the link between the molecular and cellular alterations described and the development of the chronic diseases covered during classes, as well as the mode of action of drugs targeting these alterations and their impact in other organs • be able to analyze and criticize a conference or paper in that field ; use his/her new knowledge and skills to investigate unanswered questions on the topic • imagine new approaches to study the pathophysiology of other diseases
Learning outcomes	**At the end of this learning unit, the student is able to :** 1 This course requires good knowledge of cellular and molecular biology, biochemistry of cell metabolism, immunology, cell and organ physiology, and human pathology.
Evaluation methods	Written examination or assignment. The mode of evaluation will be announced by each teacher. Questions are written in English, but students can choose to answer in French or in English. Failure to submit one assignment will lead to a final "Absent" note (0/20). The weight of the note of each teacher in the final note is proportional to the number of hours attributed. A final note (arithmetic mean) below 10/20 will be truncated (example 9.7/20 => 9/20)
Teaching methods	The course consists in a series of lectures or inverted classes on specific topics.
Content	The classes will cover the pathophysiological mechanisms underlying the development of frequent non-communicable human diseases, the drugs targeting these mechanisms and unanswered questions on the topic (biomedical research). The link between the molecular, cellular, and tissue alterations and their impact on the whole organism will be highlighted as much as possible. Diseases covered during classes include (non-exhaustive list): diabetes and its complications ; hemostatic disorders; endothelial dysfunction and vascular remodeling in cardiovascular diseases; regenerative medicine ; cancers; endometriosis ; skin diseases.
Inline resources	Slides projected during classes and additional documents will be posted on MoodleUCL.
Other infos	This course requires good knowledge of cellular and molecular biology, biochemistry of cell metabolism, immunology, cell and organ physiology, and human pathology.
Faculty or entity in charge	SBIM

Programmes containing this learning unit (UE)

Program title	Acronym