UCL Université catholique de Louvain

LCHM1371

2015-2016

Metabolic Biochemistry

5.0 credits	30.0 h + 30.0 h	2q

Teacher(s) :	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.*
Main themes :	Main themes to cover : Introduction to metabolism Bioenergetics Biochemical transport phenomenon Main metabolic ways : Glycolysis and hexose catabolism Metabolism of glycogen and glyconeogenesis Oxidation of fatty acids and biosynthesis of lipids Krebs cycle Electron transport, oxidative phosphorylation Metabolism of amino acids, nucleotides and linked molecules. Main ways of regulation. The exercises are divided into two complementary parts : One, followed in the case of CHIM BAC, consists of practical work on a specific question in biochemistry. The other, for all, consists of preparing, presenting and discussing, in groups, a question linked to a biochemical problem, but voluntarily carrying onto other disciplines of life sciences.
Aims :	The objective of the theoretical course is to examine the general aspects of glucides, lipids, amino acids and nucleotides metabolism, as well as their regulation. The course must allow the acquisition and mastering of several types of competences: General knowledge of metabolism and its regulation modes ; comprehension of reactional mechanisms, representation of main metabolic ways, as well as their main regulations ; Integration of metabolism in the physiology context of cells and organisms, mainly animal. The goal of exercises is : Deepening, by practical exercises, basic notions seen in the theoretical course ; by the realization of a personal interdisciplinary work, based on a problem-situation, integrating the understanding of metabolic biochemistry in the context of life sciences. *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".*
Faculty or entity in charge:	CHIM

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

Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Bachelor in Chemistry	CHIM1BA	5	LCHM1111 **and** LCHM1141 **and** LCHM1271	🔍