LBIR1220A

2015-2016

Biochimie I (partim EPL)

5.0 credits	30.0 h + 15.0 h	2q

Teacher(s) :	Ghislain Michel ; Larondelle Yvan ;
Language :	Français
Place of the course	Louvain-la-Neuve
Prerequisites :	Course of general biology and basic knowledge of organic chemistry
Main themes :	Structural biochemistry is a branch of biochemistry concerned with the molecular structure of macromolecules within living cells. Enzymology is the study of the macromolecules acting as catalysts for the processes that sustain life, in particular their structure, kinetics and function. Molecular biology focuses on deciphering the interactions between DNA, RNA and protein, which are responsible for DNA replication, gene expression and protein biosynthesis. These disciplines aim at understanding the activity of whole organisms through the study of the chemical processes that occur within living cells.
Aims :	a. Contribution de l'activité au référentiel AA (AA du programme) 1.1 ; 1.3 3.2 ; 3.4 ; 3.6 ; 3.7 ; 3.8 6.5 b. Topic learning goals At the end of this course, students will be able to explain the molecular basis of living organisms using appropriate terminology, and to identify suitable protein analysis systems. In particular they will be able to : - List the different classes of biomolecules and their links within the cell's processes and structures - Describe the physico-chemical characteristics and properties of the biomolecules - Explain the role of enzymes in the catalysis of chemical reactions and their regulation - Use the information to address a simple, theoretical question, related to the biotechnology field - Design an experimental approach for the study of proteins - Communicate orally and in writing, using scientific terminology and representation tools (graphics, tables or schemes) *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:	AGRO

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

Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Master [120] in Chemical and Materials Engineering	KIMA2M	5	-	
Master [120] in Biomedical Engineering	GBIO2M	5	-	
Minor in Engineering Sciences : biomedical	LGBIO100I	5	-	