




4 credits

30.0 h

Q1

Teacher(s)	Bertrand Luc ;Collet Jean-François ;De Plaen Etienne ;Rider Mark coordinator ;
Language :	English
Place of the course	Bruxelles Woluwe
Main themes	Methods of expression, purification an in vitro renaturation of proteins (5h) Protein sequencing (2h) Bioinformatic analysis of proteins (homology searches, alignments, phylogenetic studies, motif and domain searching, structure modelling) (10h) Structure determination by NMR, crystal structures by X-ray diffraction in relation to function (3h) Enzymology (thermodynamics, pre- and steady state kinetics, calculation of kinetic parameters, ligand binding and allosteric enzymes, site-directed mutagenesis, theory of metabolic control) (10 h)
Aims	To provide Masters students in Biomedical Sciences with the necessary competence to study: 1 - techniques of overexpression/purification and structural analysis of proteins - structure-function relationships in proteins - physiological roles of enzymes ----- <i>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".</i>
Evaluation methods	Written exam
Teaching methods	Formal lectures, background reading
Content	Enzymology, purification, sequencing, structure determination and bioinformatic analysis of proteins.
Bibliography	Support: Fichiers PDF des présentations Power Point distribuées aux étudiants via iCampus.
Other infos	Teaching of the course material will be in French but Power Point files will be mostly in English
Faculty or entity in charge	SBIM

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Aims
Master [60] in Biomedicine	<a href="#">SBIM2M1</a>	4		
Master [120] in Biomedicine	<a href="#">SBIM2M</a>	4		
Master [120] in Statistics: Biostatistics	<a href="#">BSTA2M</a>	4		
Master [240] in Medecine	<a href="#">MED2M</a>	4		