

## LCHM2170

2010-2011

## Introduction to protein biotechnology

3.0 credits 22.5 h + 7.5 h
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Teacher(s):	Morsomme Pierre ; Soumillion Patrice ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	1. Gene manipulation: recovery, cloning, modification, transfer and characterisation. 2. Gene expression: vectors, expression in bacteria, yeasts, plants, insect and mammalian cells, production of monoclonal antibodies. 3. Protein improvement: genetic engineering, directed evolution and chemical stabilisation.  All the underlying techniques will be briefly explained.
Aims :	The student will get to know the field of protein biotechnology for which the interactions with chemistry are continuously growing, especially in bio-pharmacy. He will learn the notions of molecular biology and genetic engineering that are useful with regard to the production and improvement of proteins. Another objective is also to acquire the vocabulary associated with these notions so that the student will later be able to interact with the experts of that field.  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".
Other infos :	The course could be partly or totally delivered by an invited lecturer.
Cycle and year of study:	Master [120] in Chemistry      Master [60] in Chemistry      Master [120] in Chemical and Materials Engineering      Master [120] in Biomedical Engineering
Faculty or entity in charge:	СНІМ