UCL Université catholique de Louvain

LBRMC2202

2010-2011

Cell culture technology

3.0 credits	30.0 h	1q

Teacher(s) :	Boutry Marc (coordinator) ; Schneider Yves-Jacques ; Remacle Claude ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	The major types of animal and plant cell cultures will be described. The importance of the culture medium content and of the growth parameters, as well as scaling-up problems will be presented. Applications in the biomedical and biotechnological fields will be illustrated.
Aims :	This course aims at introducing the students to the principles and general methods of animal and cell cultures, highlighting the industrial perspectives as well as the biological and technological constraints. *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".*
Content :	Animal (mammalian and insect) cells: properties, adhering and non-adhering cells, culture medium, serum-free medium, effect of physical parameters (scaling up). Example of production of proteins; hybridoma and monoclonal antibodies. Plant cells: culture of cells, tissues and organs, culture medium, example of production of secondary metabolites and proteins.
Other infos :	General courses of microbiology and biochemistry; Biological and microbiological engineering.
Cycle and year of study :	> Master [60] in Biology > Master [120] in Biochemistry and Molecular and Cell Biology > Master [120] in Agricultural Bioengineering > Master [120] in Chemistry and Bio-industries
Faculty or entity in charge:	AGRO