

Microbial and mammalian cell cultures



ECTS
7 crédits



Hourly volume
119h

Introducing

Description

Objectives

At the end of this module, the student will have understood and be able to explain (main concepts):

- How to establish a cell line in culture
- Mammalian cell culture specificities in terms of conditions and media
- Major uses of mammalian cells
- Various kinetic behaviours of microbial growth and production
- Several strategies from implementation of the microbial cultures in the bio-reactor

The student will be able to:

- use a vocabulary specific to cell culture
 - name major characteristics of a mammalian cell
 - manipulate a cell line
 - analyse, comment and criticize a scientific paper in the domain
 - to calculate the various kinetic and stoichiometric parameters of microbial cultures
 - to calculate the potentialities of productions for the various bio-reactors
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Necessary prerequisites

Basic knowledge of cellular Biology
Basic concepts of molecular biology
Courses of kinetics, microbiology, metabolism, reactor engineering

Évaluation

L'évaluation des acquis d'apprentissage est réalisée en continu tout le long du semestre. En fonction des enseignements, elle peut prendre différentes formes : examen écrit, oral, compte-rendu, rapport écrit, évaluation par les pairs...

Practical info

Location(s)

 Toulouse