

LBIO1311

2014-2015

Microbiology and virology

4.0 credits	40.0 h + 15.0 h	1q

Teacher(s):	Bragard Claude ; Wattiau Pierre ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	The course is divided into two main sections corresponding to the type of microorganism studied. The Bacteriology part includes: the historical accounts of microbiology, the bacterial structure, physiology and metabolism, the diversity and classification of bacteria, the various ways to control microorganisms, microbial ecology, food and industrial microbiology and finally an introduction to descriptive epidemiology. In the Virology part, the following notions are explained and illustrated: structure of viruses and viral cycles, classification, interaction between host and virus (cellular transformation, latency, antigenic variation, cancer, oncogenes, HIV), use and manipulation of viruses, antiviral vaccination and antiviral agents, virus of plants, prions and non conventional viruses.
Aims:	The main objectives of the Microbiology course is to establish the basic knowledge on microbes, mostly bacteria and viruses, and their relationships with other organisms, mainly plants and animals. Also included are the biochemical and molecular techniques and strategies used to study, but also to control, these microorganisms. 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".
Cycle and year of study :	> Master [120] in Biomedical Engineering > Bachelor in Chemistry > Bachelor in Biology > Bachelor in Veterinary Medicine
Faculty or entity in charge:	BIOL