UCL Université catholique de Louvain

WFARM1312T

2015-2016

Analyse instrumentale (techniques chromatographiques et 10h de travaux pratiques)

4.0 credits	30.0 h + 10.0 h	1q

Teacher(s) :	
Language :	Français
Place of the course	Bruxelles Woluwe
Prerequisites :	general chemistry ; organic chemistry ; introduction to the analytical chemistry
Main themes :	The teacher(s) will discuss the different kinds of spectroscopic techniques (UV, molecular fluorescence, atomic spectroscopy') ; and will then focus on the separation techniques such as HPLC and GC. They will also discuss the detectors that are used to detect the analytes following their separation (UV, FID, MS').
Aims :	At the end of the activity the student will be able to -- Differentiate the different spectroscopic techniques (type of interaction with the light, nature of the measured signal, ') -- Describe the different separation techniques that have been discussed -- Explain the consequences of a change in the experimental conditions of a separation on the result of the separation. -- Propose, based on the elements discussed during the course, the optimal method allowing the quantification of a given analyte. *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".*
Evaluation methods :	a written exam spanning from theoretical aspects to exercise resolution
Teaching methods :	WFARM1313 (practical training in instrumental analysis) allows to approach the theoretical notions in a more practical way.
Content :	-- Spectroscopic techniques -- UV-Visible -- Molecular fluorescence -- Atomic spectroscopy -- Introduction to the analytical separations -- Electrophoretic methods -- Liquid chromatograpy -- Gaz chromatography -- Introduction to the mass spectrometry
Faculty or entity in charge:	SBIM

Programmes / formations proposant cette unité d'enseignement (UE)				
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Master [120] in Biomedicine	SBIM2M	4	-	
Master [60] in Biomedicine	SBIM2M1	4	-	