UCLouvain

wfarm1313

2023

Travaux pratiques d'analyse instrumentale

3.00 credits 0 h + 105.0 h Q1



This learning unit is not open to incoming exchange students!

Teacher(s)	Herent Marie-France ;Muccioli Giulio (coordinator) ;				
Language :	French				
Place of the course	Bruxelles Woluwe				
Prerequisites	The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.				
Main themes	The teacher(s), helped by graduate students and technicians, will discuss the different types of instrumental analysis techniques. The goal is first to give the practical basis to understand the theoretical notions studied during WFARM1312; second to explain how to use an analytical instrument in order to obtain relevant results.				
Learning outcomes	At the end of this learning unit, the student is able to :				
	At the end of the activity the student will be able to				
	Understand the functioning and use measuring electrodes, including pHmeters Use, based on written procedures, the different analytical instruments used in the lab Build and use a calibration curve for different analytical techniques Interpret the data obtained by instrumental analysis				
Evaluation methods	continuous evaluation based on the post-experiment report, on the evaluation of the student preparation and on the general behavior during the activity.				
	the grade obtained at the end of the activity (i.e. first session) is final. It is not possible to reevaluate the student during the 3rd session of exams (august/september)				
Teaching methods	the activity takes place in didactic labs.				
Content	General aspects of the instrumental analysis Conductometry Ion-selective potentiometry				
	Acid-base titrations ' redox titrations Spectrophotometry				
	pKa measuring ' spectrophotometric quantification of iron Atomic spectroscopy				
	Sodium and potassium quantification Zone electrophoresis Gaz chromatography				
	Methyl salicylate quantification ' fatty acid quantification High performance liquid chromatography				
	Caffeine quantification ' dye quantification				
Inline resources	The materials for the practical part of the activity is also available on the "moodle" platform.				
Faculty or entity in charge	FARM				

Programmes containing this learning unit (UE)						
Program title	Acronym	Credits	Prerequisite	Learning outcomes		
Bachelor in Pharmacy	FARM1BA	3	WFARM1243 AND WFARM1244 AND WFARM1219	0		