wfarm1313

2020

Due to the COVID-19 crisis, the information below is subject to change, in particular that concerning the teaching mode (presential, distance or in a comodal or hybrid format).

3 credits	0 h + 105.0 h	Q1

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.
Aims	At the end of the activity the student will be able to 1 • 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 - - - - *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	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** 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	**Due to the COVID-19 crisis, the information in this section is particularly likely to change.** 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	Aims
Bachelor in Pharmacy	FARM1BA	3	WFARM1243 AND WFARM1244 AND WFARM1231 AND WFARM1219	🔍