

3.00 credits

0 h + 66.0 h

Q1

Teacher(s)	Garcia Yann ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	It is recommended to have acquired the knowledge and skills developed in the teaching units: LCHM1111 Chimie générale LCHM1211 Chimie générale 2 LPHY1101 Physique 1 LPHY1102 Physique 2 Do not take LCHM1322 without LCHM1321 <i>Analytical Chemistry 1</i> (or having passed it previously).
Main themes	A series of practical exercises on titration methods, gravimetry, potentiometric analysis, chromatographic and spectroscopic techniques are proposed. The student should rely on his Analytical chemistry I course and on the available literature in order to select the most appropriate reactants as well as to define relevant operating modes.
Learning outcomes	At the end of this learning unit, the student is able to : <ul style="list-style-type: none"> - To favour the understanding of Analytical chemistry I course - To familiarize the student with the theory-experience relationship - To train the student to a professional behaviour in a chemistry laboratory - To give the student an initiative spirit for practical manipulations
Evaluation methods	Evaluation : <ul style="list-style-type: none"> - on the quality of experimental results (/5), - reports given during classes (/5), - laboratory note book maintenance (/5), - tests at the beginning of the labs (/5). A global evaluation can be organised on a selected experiment in the lab.
Teaching methods	Laboratories
Content	Practical exercises on titrimetric methods, gravimetry, potentiometric analysis, chromatographic and spectroscopic techniques. The exercises are presented in a succinct manner, their execution requires from the student the use of the theoretical teaching and the literature at his disposal in order to carry out in a reasoned way the choice of the reagents and to define the operating modes.
Inline resources	Moodle and Teams
Bibliography	- Fundamentals of Analytical Chemistry, D. A. Skoog, D. M. West, F. J. Holler, S. R. Crouch, 8th ed., Thomson Brooks/Cole, 2004. - Quantitative Chemical Analysis, D. C. Harris, 8th ed., W. H. Freeman & Co., 2011 - Méthodes instrumentales d'analyse chimique et applications, G. Burgot, J. -L. Burgot, 2e ed, Lavoisier, 2006. - Exploring Chemical analysis, D. C. Harris, 5th ed., W. H. Freeman & Co., 2012 - Fascicule pour les exercices pratiques. - Littérature mise à disposition de l'étudiant.
Faculty or entity in charge	CHIM

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Bachelor in Chemistry	CHIM1BA	3		