UCL Université catholique de Louvain

LCHM1231

2016-2017

Elements of inorganic and analytical chemistry

6.0 credits	30.0 h + 50.0 h	2q

Teacher(s) :	Devillers Michel ;
Language :	Français
Place of the course	Louvain-la-Neuve
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 theoretical course covers the main group elements (s and p blocks) as well as the transition elements (including lanthanides and actinides). It includes a brief introduction to metallurgy and radioactivity. The first chapter describes in a general way the periodicity of chemical and physical-chemical properties. The second chapter is dedicthe ated to hydrogen and its binary compounds. The next chapters are successively dedicated to the different families of the periodical table. In each case, the general characteristics of the group, the obtention, properties and uses of the most important elements and of their main compounds are described. Emphasis is put on practical and environmental aspects. These practical exercises deal with the qualitative analysis of cations and anions in aqueous solutions. The analyses cover about 50 different species. The analytical approach is based on the chemical properties of the elements depending on their position in the periodical table. The student mustbe familiar with the simultaneous use of acid-base precipitation, complexation and redox properties.
Aims :	The goal of this course is to give students theoretical and practical basis in the main physical and chemical properties of the elements and their most important compounds. *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".*
Faculty or entity in charge:	CHIM

Programmes / formations proposant cette unité d'enseignement (UE)				
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Bachelor in Chemistry	CHIM1BA	6	LCHM1111	🔍