lchm1211a

2024

Chimie générale 2

5.00 credits	30.0 h + 30.0 h	Q2

Teacher(s)	Garcia Yann ;Leyssens Tom ;
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 LPHY1101 Physique 1 LPHY1102 Physique 2 *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	**0. INTRODUCTION TO PHYSICAL CHEMISTRY** Chemical equilibrium and partition coefficients. Applications. **1. THERMODYNAMICS** First principle of thermodynamics. Thermochemistry. Second principle of thermodynamics. Free Enthalpy. **2. PHASE EQUILIBRIA** Generalities. One-component systems: state diagram of a pure body. Thermodynamics and phase transition temperature. Phase rule. Two-component systems: binary phase diagrams. **3. CHEMICAL EQUILIBRIA IN SOLUTION** A/ Complements of acid-base equilibria and pH-metry. B/ Solubility and complexation. Complex reaction networks. Quantitative study of some cases. **4. COMPLEMENTS OF ELECTROCHEMISTRY** Electrolysis. Conductivity of solutions. Batteries. *Part 3A is not included in LCHM1211A.*

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Bachelor in Bioengineering	BIR1BA	5	LBIR1140 AND LBIR1170	🔍