



CHM1211 General Chemistry 2

[30h+54h exercises] 6 credits

Teacher(s): Michel Devillers (coord.), Bernard Tinant
Language: French
Level: First cycle

Aims

This course is the continuation of "General chemistry 1". It is aimed at providing a more detailed understanding of the concepts related to chemical equilibria, thermodynamics and electrochemistry. Particular attention is paid to the quantitative aspects of these phenomena and to the use of numerical database. The course will also introduce to the phase equilibria. The basic concepts will be illustrated with examples from the major industrial processes (electrolysis, metallurgy) or related to daily life.

Main themes

Starting with a summary and overview of the main basic concepts from the course "General chemistry 1", this course will deal with (1) complementary notions on the quantitative treatment of chemical equilibria, (2) complements of thermodynamics : applications of the first law, thermochemistry and introduction to the second law (entropy, free enthalpy), (3) complements of electro-chemistry (electrolysis, electrical conductivity of solutions, introduction to the main analytical applications) and (4) an introduction to the study of phase equilibria (systems with one or two constituents).

Other credits in programs

BIR12BA	Deuxième année de bachelier en sciences de l'ingénieur, orientation bioingénieur	(6 credits)	Mandatory
CHIM12BA	Deuxième année de bachelier en sciences chimiques	(6 credits)	Mandatory