

MD1003 Mineral and general chemistry

[60h+28h exercises] 8 credits

Teacher(s): Language: Level: Paul Depovere, Claude Ronneau French First cycle

Aims

1. Acquisition of basic knowledge and main concepts of General Chemistry.

2. Practical exercices on some basic techniques in General Chemistry.

Main themes

The main themes of this course are :

(i) Chemical equations, quantitative mass relationships, volumes and concentrations of solutions.

(ii) Atomic structure and chemical bonding.

(iii) Elements of chemical thermodynamics (enthalpy, entropy, Gibbs free energy) and the chemical equilibrium.

(iv) Solution chemistry : acids and bases, pH, precipitation and solubility products, equilibria involving complex ions, redox reactions, electrode potentials and electromotive force.

(v) Elements of chemical kinetics.

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Prerequisite : sufficient knowledge of French ; familiarity with classical mathematical tools (e.g. basic algebra, logarithms). Evaluation : written examination measuring problem solving capabilities (ca. 6 questions).

Other credits in programs

DENT11BA	Première année de bachelier en sciences dentaires	(8 credits)	Mandatory
MED11BA	Première année de bachelier en médecine	(8 credits)	Mandatory