

CHIM/03 Chemistry (General and Inorganic)

Academic year: 2016-2017

Faculty: Pharmacy

Study courses: LM13-Pharmaceutical Chemistry and Technology

Study plans/Curricula: -

Type: Fundamental

Total Credits: 10

Didactic Methods: Lessons and practice blackboard exercises

Didactic Period: First semester

Exam type: Written and oral

Professor in charge: Prof. Nicola Margiotta

Training objectives

To write and balance chemistry reactions; to carry out stoichiometric calculations, to learn the structural features of the matter as well as to face the issues of the chemical equilibrium and electrochemistry.

Prerequisites

Basic concepts from secondary school.

Didactic Methods

PowerPoint assisted lessons and practical exercises resolved at the blackboard.

Course programme

PROGRAMME:

Lectures: (64 h)

1. Fundamental laws of chemistry, Empirical formulae and molecular formulae
2. Atom and Chemical bond
3. Chemical nomenclature and chemical reactions
4. The states of matter, Solutions and colligative properties
5. Chemical thermodynamics and principles of kinetics
6. Chemical equilibrium, Equilibria in solution: pH
7. Electrochemistry: galvanic cells and electrolysis

Numerical applications (24 h)

Reference Texts

CHIMICA (V Edizione): Kotz, Treichel, Townsend. Casa Editrice: EdiSES.