

Chim/02 fundamental didactic activity

Academic year: 2016-2017

Faculty: Department of Chemistry

Study courses: **PHYSICAL CHEMISTRY II**

Study plans/Curricula: 3-year Degree in Chemistry

Type: fundamental didactic activity with integrated final examination

Total Credits: 6

Didactic Methods: frontal lessons

Didactic Period: fourth semester (March-June)

Exam type: oral examination

Professor in charge: Catucci Lucia

Training objectives

Acquisition of principles of quantum mechanics, spectroscopy and chemical kinetics

Prerequisites

knowledges of mathematics, physics and general chemistry

Course programme

PROGRAMME:

Lectures: (48 h)

1. Quantum theory: principles and applications
2. Electronic spectroscopy
3. Rotational and vibrational spectroscopy
4. Nuclear magnetic resonance spectroscopy
5. Kinetic chemistry and molecular dynamics

Reference Texts

“Chimica Fisica” Terza edizione italiana, Peter W. Atkins – Zanichelli