

## Chim/02 fundamental didactic activity

Academic year: 2016-2017

Faculty: Department of Pharmacy and Drug Sciences

Study courses: **CHIMICA FISICA**

Study plans/Curricula: 5-year Degree in Chemistry and Pharmaceutical Technology

Type: fundamental didactic activity with integrated final examination

Total Credits: 8

Didactic Methods: frontal lessons

Didactic Period: Third Semester (October-January)

Exam type: Written and oral examination

Professor in charge: Catucci Lucia

### **Training objectives**

Acquisition of the principles of thermodynamics, spettroscopy and kinetics

### **Prerequisites**

knowledges of mathematics, physics and general chemistry

### **Course programme**

PROGRAMME:

Lectures: (64 h)

1. Properties of gases
2. Thermodynamics
3. Properties of solutions
4. Phase equilibria
5. Dispersed systems: colloids and surfactants
6. Chemical kinetics
7. Hints of quantum mechanics
8. Atomic and Molecular Structure
9. Molecular spectroscopy

### **Reference Texts**

P.W. Atkins, J.De Paula. "Elementi di Chimica Fisica" (terza edizione italiana), Zanichelli, Bologna

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