

COURSE: : General and Inorganic Chemistry			
ACADEMIC YEAR: 2016-17			
TYPE OF EDUCATIONAL ACTIVITY: Affine			
TEACHER: : Prof. Patrizio Grimaldi			
e-mail: : patrizio.grimaldi@unibas.it		website:	
phone: 0971/205649		mobile (optional):	
Language: Italian			
ECTS: 8	n. of hours: 72	Campus: Potenza Department of Scienze BIOTECHNOLOGIES	Semester: I (from 03/10/2016 to 15-31/01/2017

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

The course aims to give to the students basic chemistry knowledges so that, at the end of the course, they are able to solve simple stoichiometry problems and to understand elementary chemistry literature from atomic theory to acid-base equilibria in aqueous solution

PRE-REQUIREMENTS

Elementary mathematical knowledges.

SYLLABUS

Keys to the Study of Chemistry; The Components of Matter; Stoichiometry of Formulas and Equations; Three Major Classes of Chemical Reactions; Gases and the Kinetic-Molecular Theory; Thermochemistry: Energy Flow and Chemical Change; Quantum Theory and Atomic Structure; Electron Configuration and Chemical Periodicity; Models of Chemical Bonding; The Shapes of Molecules; Theories of Covalent Bonding; Intermolecular forces: Liquids, Solids, and Phase Changes; The Properties of Mixtures: Solutions and Colloids; Kinetics: Rates and Mechanisms of Chemical Reactions; Equilibrium: The Extent of Chemical Reactions; Acid-Base Equilibria; Ionic Equilibria in Aqueous Systems; Thermodynamics: Entropy, Free Energy, and the Direction of Chemical Reactions; Electrochemistry: Chemical Change and Electrical Work

TEACHING METHODS

Theoretical lessons, Classroom tutorials, E-learning

EVALUATION METHODS

Written examination, Oral examination

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

M.S. Silberberg – CHEMISTRY – McGraw-Hill

INTERACTION WITH STUDENTS

Teacher's office Wednesday 11.30-12.30

LOGO DELLA STRUTTURA PRIMARIA

Almost in every moment by e-mail and Skype.

EXAMINATION SESSIONS (FORECAST)

31-1-17; 1-3-17; 2-5-17; 1-6-17; 4-7-17; 5-9-17

SEMINARS BY EXTERNAL EXPERTS	NO
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FURTHER INFORMATION
