

Chemistry



ECTS



Hourly volume
112h

Introducing

Basic knowledge in physical science (atoms structure, radiation) and in chemistry as describe in the program of the final year high school science.

Objectives

1. Memorize the definitions and the chemistry-related vocabulary.
2. Determine the atom structure
3. Describe the structure of the periodic table of the elements.
4. Propose a structure for a molecule (Lewis and spatial) from its raw formula.
5. Describe the link within molecules.
6. Describe both structure, metallic and ionic solid.
7. Describe interactions between molecules.
8. Describe the liquid water structure and explain the main reactivities in solution (equation balance sheet reflecting a reaction of dissolution, precipitation, acid-basic or oxidation- reduction).
9. Analyse a problem to identify the ingredients likely to be present in solution. Deduce one or several equations showing the conservation of elements, the electro neutrality and the constant of balance.
10. Solve a problem about chemistry solutions coming up with as equation as there is unknowns in this problem in order to calculate the unknowns concentration.
11. Describe the principle and be able to implement the basic experimental technics for the analysis
12. Carry out a lab experiment and analyse the result.

Practical info

Location(s)

 Toulouse

Necessary prerequisites