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| 8.0 credits | 45.0 h + 45.0 h | 1q |
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| Teacher(s) :                 | Tinant Bernard ;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Language :                   | Français                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Place of the course          | Louvain-la-Neuve                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Main themes :                | - Atoms and elements. - Periodic table : Klechowski's rule, Hund's rule and Pauli's principle. - Hybridization of atomic orbitals. - Covalent-, ionic-, partial covalent bonds, intermolecular forces. - Molecular geometry. - Typical reactions of the inorganic chemistry. - Writing and balancing chemical equations. - Perfect gas law. - Elements of chemical thermodynamics : 1st and 2nd law. - Chemical equilibrium. - Chemical kinetics. - Theories of acids and bases, pH computations. - Solubility. - Electrochemistry and chemical cells. |
| Aims :                       | The aim of those lectures is to introduce the basic concepts of general and inorganic chemistry for freshmen in medical and veterinary students.<br><i>The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".</i>                                                                                                                                           |
| Content :                    | The lecture content is described ahead. Classes are held orally twice a week (2x2h). A training period of exercises with numerical problems is offered every week to groups of students (about 20) in order to improve the understanding of the chemical principles. Five to six laboratory sessions for practical are organised with 40 to 50 students altogether. Tutorials are planned weekly to answer individually specific questions raised by a student.                                                                                        |
| Other infos :                | Prerequisites: good knowledge in mathematics Evaluation: written examination with practical exercises followed by oral examination with theoretical questions Support: notes written by teachers, exercise book containing also operating methods for laboratory work Staff support: teachers and teaching assistants                                                                                                                                                                                                                                  |
| Cycle and year of study :    | <a href="#">&gt; Bachelor in Veterinary Medicine</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Faculty or entity in charge: | VETE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |