

**Code: 1748 Chemistry****Degree:** all 1<sup>st</sup> cycles, except Biology**Curricular Year:** 1<sup>st</sup>**Credits:** 6 ECTS**Semester Course:** 1<sup>st</sup> (Engineering) 2<sup>nd</sup> (Landscape Architecture)  
**Compulsory****Language:** Portuguese/English**Responsible:** Amarilis Paula Alberti de Varennes e Mendonça**Other lecturer(s):** Henrique Manuel Filipe Ribeiro, Luís Manuel Vieira Soares de Resende and Maria Odete Pereira Torres**Web Site:** <http://www.isa.utl.pt/home/node/3978>**1. Contact hours:****Lecture/Practicals 70 Others 14 Total 84****2. Objectives:**

To understand the main concepts on inorganic chemistry and to relate to practical problems.

**3. Programme:**

Electronic structure and chemical bonding.

Reactions and equilibrium.

Chemical thermodynamics.

Acids, bases and titrations.

pH

Buffers.

Redox reactions

Insoluble salts and precipitation.

Soluble salts, conductivity and osmotic potential.

Complexes and chelates.

**4. Bibliography:****Main Bibliography**

Powerpoint presentations available on the internet.

CHANG, RAYMOND (2005) - Química, 8ª edição, ed. Mc Graw Hill.

**5. Assessment:**

Continuous evaluation. A final exam for students that failed during term

**6. Estimated Workload:**

168

Hours

**7. Last Update:**

8/7/2010