Overview

This course builds on an elementary knowledge of chemistry (equivalent to two years of high school chemistry, such as Year 12 chemistry, or CHEM1001 at UNSW) to explore the quantum mechanical structure of atoms leading to an understanding of the periodic trends in the properties of the elements. This knowledge is applied to understanding chemical bonding and intermolecular forces which together are responsible for determining the properties of materials. General principles of chemical equilibrium are developed and applied to chemical reactions involving acids and bases. The applications of the laws of Thermodynamics to chemical processes are described and ultimately linked to chemical equilibrium. The course involves an overview of chemical reactions involving electron transfer, including their applications in biology, corrosion and energy storage for portable electronic devices.

This course covers the same material as CHEM1011, but has additional workshops that illuminate the role of chemistry in broader society, as well as the attributes of a professional chemistry researcher.

Note:

1. Assumed knowledge equivalent to year 12 chemistry or CHEM1001.
2. Students cannot subsequently enrol in CHEM1001 after completing CHEM1031. However, students may complete CHEM1001 followed by CHEM1031.
Faculty
Faculty of Science

School
School of Chemistry

Study Level
Undergraduate

Offering Terms
Term 1

Campus
Kensington

Indicative contact hours
8

Timetable
Visit timetable website for details
Conditions for Enrolment

Prerequisite: Must be enrolled in a program with the option of a CHEM major
Equivalent Courses

CHEM1011 6 UOC
Chemistry 1A: Atoms, Molecules and Energy

DPST1031 6 UOC
Chemistry A: Atoms, Molecules, and Energy

CHEM1051 6 UOC
Higher Chemistry 1A (Medicinal): Atoms, Molecules and Energy

CHEM1831 6 UOC
Chemistry for Exercise Physiology
Exclusion Courses

DPST1031 | 6 UOC
Chemistry A: Atoms, Molecules, and Energy

CHEM1051 | 6 UOC
Higher Chemistry 1A (Medicinal): Atoms, Molecules and Energy

CHEM1011 | 6 UOC
Chemistry 1A: Atoms, Molecules and Energy
Course Outline

To access course outline, please visit:

CHEM1031 Course Outline
Fees

**Commonwealth Supported Students**  $1191
**Domestic Students**  $5970
**International Students**  $5970

**DISCLAIMER**
Please note that the University reserves the right to vary student fees in line with relevant legislation. This fee information is provided as a guide and more specific information about fees, including fee policy, can be found on the [fee website](#).

For advice about fees for courses with a fee displayed as "Not Applicable", including some Work Experience and UNSW Canberra at ADFA courses, please contact the relevant Faculty. Fees for courses delivered through [UNSW Global](#) are published and charged by UNSW Global and thus appear as "Not Applicable" on this site.

Where a Commonwealth Supported Students fee is displayed, it does not guarantee such places are available.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

Pre-2019 Handbook Editions