Course

Higher Chemistry 1B: Elements, Compounds and Life

CHEM1041 | **6 Units of Credit**

Overview

CHEM1041 deals with a range of fundamental concepts that can be used to explain various phenomena in chemistry, biology and material science. It enables students to develop further their knowledge of Chemistry and probes a diverse range of molecules and their reactions, focusing on applications such as drug development, functional materials, environmental chemistry, and renewable energies.

A key part of chemistry is understanding the speed of chemical reactions, a concept that underpins much of the material that is taught later in the course. The course introduces modern structure determination methods and the concepts of stereochemistry, which are important in understanding the shape and structure of chemicals. The next section of the course provides a thorough introduction to modern inorganic chemistry and use of the periodic table as a powerful predictive tool. Important foci are the chemistries of main-group and transition metals. Transition metal compounds, d-element electron configuration, new metal bonding theories and the key reaction mechanisms exhibited by transition metal chemistry are discussed. The final section of the course deals with the chemistry of carbon-containing compounds and provides a thorough introduction to the field by emphasising the reaction mechanisms that provide insight into how reactions of these molecules proceed. Students are introduced to a range of chemistry that enables the preparation of new molecules starting from readily available materials. The course concludes with a summary of how these concepts are applicable to the development of novel pharmaceutical drugs.

Faculty
Faculty of Science

School
School of Chemistry

Study Level
Undergraduate

Offering Terms
Term 2

Campus
Kensington

Indicative contact hours
8

Timetable
Visit timetable website for details

Conditions for Enrolment

Prerequisite: CHEM1031, or CHEM1011 with a credit or above.

Exclusion Courses

CHEM1821 | 6 UOC
Engineering Chemistry 1B

CHEM1021 | 6 UOC
Chemistry 1B: Elements, Compounds and Life

CHEM1061 | 6 UOC
Higher Chemistry 1B (Medicinal): Elements, Compounds and Life

---

DPST1032 | 6 UOC
Chemistry B: Elements, Compounds and Life

Course Outline

To access course outline, please visit:

CHEM1041 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.

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

Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179