Overview

CHEM1021 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 to study the speed of chemical reactions providing a strong foundation for material covered 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 an introduction to modern inorganic chemistry and use of the periodic table is a powerful predictive tool. Important foci are the chemistries of main-group and transition metals. Transition metal compounds, d-element electron configuration the 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 an 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 new pharmaceutical drugs.
Faculty
Faculty of Science

School
School of Chemistry

Study Level
Undergraduate

Offering Terms
Term 1, Term 2, Term 3

Campus
Kensington

Indicative contact hours
8

Timetable
Visit timetable website for details
Conditions for Enrolment

Prerequisite: CHEM1011 or CHEM1031.
Equivalent Courses

DPST1032 6 UOC
Chemistry B: Elements, Compounds and Life
Exclusion Courses

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

CHEM1041  |  6 UOC  
Higher Chemistry 1B: Elements, Compounds and Life

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

To access course outline, please visit:

CHEM1021 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.
Additional Information

This course is offered as General Education.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

Pre-2019 Handbook Editions
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Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179