

In Progress

Please note that this Unit Profile is still in progress. The content below is subject to change.



CHEM11042 *Fundamentals of Chemistry*

Term 1 - 2027

Profile information current as at 07/09/2026 08:54 pm

All details in this unit profile for CHEM11042 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

This unit will provide you with the fundamental principles of chemistry that underpin the medical sciences and provide a strong foundation on which you can develop an understanding of biochemistry and molecular science. You will gain an appreciation of the nature of matter, classic atomic structure and how energy is involved in bond formation. These concepts will be developed to explain the forces between molecules that govern chemical interaction. You will be introduced to the chemistry of electrolytes, acids, bases and buffers. This study will be supported by simple calculations to assist you in relating to the pH scale. The study of organic chemistry and molecules central to the life sciences will enable you to develop an understanding of the biochemistry and molecular biology relevant to your specific discipline. The naming and classifying of chemical compounds will enable you to be conversant with accepted scientific terms. Tutorials and on-line activities will complement the theoretical knowledge gained in lectures and provide you with the basic mathematical and analytical tools required in the application of chemistry to your specific discipline.

Details

Career Level: *Undergraduate*

Unit Level: *Level 1*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

There are no requisites for this unit.

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

Offerings For Term 1 - 2027

- Online

Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important](#)

that you visit your Moodle site throughout the term. Please visit Moodle for more information.

Class and Assessment Overview

Information for Class and Assessment Overview has not been released yet.
This information will be available on Monday 11 January 2027

CQUniversity Policies

All University policies are available on the [CQUniversity Policy site](#).

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Academic Progression Policy and Procedure
- Student Refund and Credit Balance Policy and Procedure
- Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from SUTE

Feedback

Students suggested to provide real examples of how a paramedic can use inorganic and organic chemistry, e.g., alkanes, alkenes, and alkynes, when they are treating a patient or casualty.

Recommendation

The Unit Coordinator should develop additional real-life examples that explicitly link chemistry concepts, including alkanes, alkenes, and alkynes, to paramedic practice. Incorporating examples from both organic and inorganic chemistry would further demonstrate how chemical principles are applied in everyday paramedic contexts, such as understanding medications, physiological processes, and clinical interventions. These enhanced learning resources should be made available to students through Moodle to strengthen their understanding of the relevance of chemistry, support deeper engagement with the unit content, and highlight the practical application of chemistry knowledge within their future professional practice.

Feedback from SUTE

Feedback

Students provided positive feedback on the new Moodle booklets, noting that they found them useful and helpful for their learning.

Recommendation

This is an encouragement feedback. Moodle weekly booklet was introduced to this unit for the first time this term from a senior educational developer staff. Moodle weekly booklet should remain on Moodle.

Feedback from SUTE

Feedback

Students commented that the short JoVe videos were useful learning resources that helped clarify challenging concepts.

Recommendation

JoVE videos should remain available on Moodle to continue supporting diverse learning styles within the unit. These visual learning resources provide students with additional opportunities to engage with complex concepts, reinforce their understanding through multiple modes of learning, and accommodate different learning preferences. Maintaining access to JoVE videos will further enhance student engagement and support an inclusive and effective learning environment.

Unit Learning Outcomes

Information for Unit Learning Outcomes has not been released yet.
This information will be available on Monday 11 January 2027

Alignment of Learning Outcomes, Assessment and Graduate Attributes

Information for Alignment of Learning Outcomes, Assessment and Graduate Attributes has not been released yet.
This information will be available on Monday 11 January 2027

Textbooks and Resources

Information for Textbooks and Resources has not been released yet.
This information will be available on Monday 15 February 2027

Academic Integrity Statement

Information for Academic Integrity Statement has not been released yet.
This unit profile has not yet been finalised.