In Progress

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

CHEM11042 *Fundamentals of Chemistry*

Term 2 - 2025

Profile information current as at 05/09/2024 01:41 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 2 - 2025

- 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 19 May 2025

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
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and 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

Some students provided feedback that the unit was well structured, and appreciated the study guide. Students suggested was that they have found the Khan Academy videos really helpful for chemistry.

Recommendation

I recommend that the chemistry teaching team work on creating extra learning resources, such as providing useful video links on the Moodle site each week. These videos can be used to provide wider learning accessibility for visual and tactile learners.

Feedback from SUTE

Feedback

Some students' suggested reformatting the chemistry study guide to include hyperlinks and bookmarks, allowing for easier navigation within the resource.

Recommendation

I recommend that the chemistry teaching team collaborates with the Learning Design team to explore the possibility of converting the study guide into hyperlinks or bookmarks on the Moodle site.

Feedback from SUTE

Feedback

A few students still thought the lectures were not helpful, that it was simple presentation from bullet points and there were no clear explanations.

Recommendation

I recommend that the chemistry teaching team maintains an ongoing process of reviewing and updating learning materials and resources, including videos and the study guide. This will ensure that the materials remain current, relevant and engaging for students.

Feedback from SUTE

Feedback

Some students' feedback was to make the recorded videos more interesting and less 'monotone'. Suggestions were for more examples and in depth explanations.

Recommendation

I strongly recommend that the chemistry teaching team focus on enhancing the quality of the recorded videos and incorporate additional worked examples into the lectures. Current recordings are out of date, contain technical issues, and do not reflect the high standards we strive to offer to our students. Additionally, the teaching team should aim to provide extra learning resources on a weekly basis, such as links to relevant video resources, catering to the needs of visual and tactile learners. This approach will further enrich the learning experience for students.

Feedback from SUTE

Feedback

Some students still do not believe that chemistry is relevant to their chosen field and need more clarity on how the content relates back to healthcare settings and scenarios and to paramedic science. This also impacted negatively on their engagement with the units learning materials.

Recommendation

I recommend that the teaching team continues to collaborate with relevant disciplines in the unit redesign process and proactively addresses any potential issues that may arise. Furthermore, the teaching team should foster collaborative learning among students and themselves by facilitating online Q&A sessions and discussion forums. These platforms will enable students to ask questions, seek clarifications, and engage in meaningful discussions, ultimately enhancing the overall learning experience.

Unit Learning Outcomes

Information for Unit Learning Outcomes has not been released yet.
This information will be available on Monday 19 May 2025

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 19 May 2025

Textbooks and Resources

Information for Textbooks and Resources has not been released yet.
This information will be available on Monday 23 June 2025

Academic Integrity Statement

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