

In Progress

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



ENVH12003 *Environmental Toxicology*

Term 2 - 2024

Profile information current as at 19/05/2024 09:26 am

All details in this unit profile for ENVH12003 have been officially approved by CQU University 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

Environmental toxicology is the study of the nature, properties, effects, and detection of toxic substances in diverse environments and those exposed. In this unit, you will study an introduction to basic toxicology from a public health perspective, focusing on developing an understanding of the principles of the discipline and the concepts relating to environmental exposures. Topics that will be covered include routes of exposure, the concept of dose, dose-response relationships, absorption and distribution of toxicants, biotransformation and elimination, target organ toxicity, carcinogenesis, mutagenesis, teratogenesis and risk assessment. You will examine toxicants of interest within community and occupational environments as well as how they are tested and regulated. You will practise your professional skills by reviewing case studies and special topics of interest.

Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Prerequisites: 48 credit points AND SCIE11022 OR ENVH11001 OR CHEM11041 OR CHEM11042 OR CHEM11044 Students who have completed other Chemistry or Biochemistry units should contact the Unit Coordinator.

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 - 2024

- 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

Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

[Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

[Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

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 Reflection

Feedback

Learning material could be more interactive.

Recommendation

Commence development of H5P activities to include in learning material

Feedback from Informal student feedback

Feedback

Refreshed weekly lectures were very useful and easy to follow. Topic 6 requires an updated lecture recording.

Recommendation

Record a new lecture for Topic 6 (Target organs & systems: nephrotoxicity, hepatotoxicity and neurotoxicity)

Feedback from Informal feedback from students by email and Zoom.

Feedback

Tutorials relating to Assessment task 3 (Report) with worked examples and guidance on drafts were very well regarded by students who attended.

Recommendation

Continue these tutorials in 2024 and emphasise the relevance to Assessment task 3 to encourage greater attendance.

Feedback from Observation

Feedback

Overall, drop-in tutorials were not attended by 70% of students.

Recommendation

Consider formally timetabling drop-in tutorials, particularly those relating to Assessment task 3 (Report) to highlight their importance to students.

Feedback from SUTE

Feedback

The response rate to SUTE was relatively low at 5/13 (38%), making feedback somewhat contradictory and unreliable.

Recommendation

Promote SUTE more overtly during the later weeks of term.

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

1. Define fundamental toxicological concepts
2. Identify and classify a range of common toxicants and their environmental sources
3. Explain the dose-response relationship and its implications and applications
4. Describe fundamental processes and endpoints relating to toxicants within the human body
5. Apply the principles of risk assessment and risk management to toxicological situations
6. Discuss major issues in environmental toxicology relating to exposures from natural and anthropogenic sources
7. Critically consider the ethical and regulatory implications of toxicological research, associated uncertainties and risk communication.

Bachelor of Public Health (Environmental Health)

Foundation and applied environmental toxicology (LOs 1, 2, 3, 4 & 6) are identified as underpinning skills and knowledge in Part 2 of the Environmental Health Australia Skills & Knowledge Matrix, used as the basis for accreditation of the Bachelor of Public Health (Environmental Health) course. Methods of risk assessment and management (including as applied to toxicological issues) (LO 5) and the use of evidence in regulatory practice (LO7) are also identified as underpinning knowledge. Additionally, toxicology is an integral part of many of the activity-specific skills and knowledge identified in Part 3 of the Matrix.

Bachelor of Occupational Health & Safety

An understanding of toxicology is also important to support studies in Occupational Hygiene, considered a core knowledge area in the Safety Institute of Australia's Body of Knowledge, proposed to be used for accreditation of OHS courses within Australia.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes						
	1	2	3	4	5	6	7
1 - Online Quiz(zes) - 20%	•	•	•				
2 - Written Assessment - 40%					•	•	•
3 - Take Home Exam - 40%	•	•	•	•			

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes						
	1	2	3	4	5	6	7
1 - Communication	•	•	•	•		•	•
2 - Problem Solving		•	•	•	•		•
3 - Critical Thinking	•	•	•	•	•	•	•
4 - Information Literacy		•	•	•	•	•	•

Graduate Attributes	Learning Outcomes						
	1	2	3	4	5	6	7
5 - Team Work							
6 - Information Technology Competence							
7 - Cross Cultural Competence							• •
8 - Ethical practice						•	• •
9 - Social Innovation							
10 - Aboriginal and Torres Strait Islander Cultures							

Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Online Quiz(zes) - 20%	•		•	•						
2 - Written Assessment - 40%	•	•	•	•			•	•		
3 - Take Home Exam - 40%	•	•	•							

Textbooks and Resources

Information for Textbooks and Resources has not been released yet.
This information will be available on Monday 17 June 2024

Academic Integrity Statement

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