



# HLTH13031 Population Health Epidemiology

## Term 3 - 2023

Profile information current as at 24/04/2024 01:13 am

All details in this unit profile for HLTH13031 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 explores the importance and role of epidemiology as an approach to both public health and clinical practice. You will be able to use evidence from epidemiological investigations, to understand the distribution of health outcomes in populations and understand the influence of factors that determine this distribution. The critical function of epidemiology will be reviewed including areas of anticipated needs, identified risk conditions, definition of priorities and the use of available resources for planning and administering health care services.

### Details

Career Level: *Undergraduate*

Unit Level: *Level 3*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

Prereq: 72 credit points (any tertiary level units)

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 3 - 2023

- 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

#### 1. **Presentation**

Weighting: 25%

#### 2. **Group Discussion**

Weighting: 25%

#### 3. **Written Assessment**

Weighting: 50%

### 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 Personal reflection

##### Feedback

Tutorial

##### Recommendation

While tutorials are indeed scheduled, many students choose not to attend them. It could prove beneficial to introduce drop-in tutorial sessions, thereby channelling additional resources toward assisting students online through Moodle and providing one-on-one support as required.

## Unit Learning Outcomes

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

1. Calculate and communicate epidemiological statistics relating to the measurement of health, wellness and disease.
2. Interpret epidemiological data within theories and frameworks of social justice and cultural diversity for effective knowledge transfer and exchange.
3. Evaluate epidemiological investigations and sources of epidemiological data to identify inequities, enable change and advocate for health.
4. Argue for a population health outcome using relevant research methods and approaches.
5. Explain principles of data confidentiality and disclosure, and apply the ethical use of data.

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes				
	1	2	3	4	5
1 - Presentation - 25%	•	•			
2 - Group Discussion - 25%			•	•	•
3 - Written Assessment - 50%	•	•	•	•	•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
1 - Communication	•	•	•	•	•

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
2 - Problem Solving	•	•	•	•	
3 - Critical Thinking	•	•	•	•	
4 - Information Literacy	•	•	•		
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 - Presentation - 25%	•		•	•		•		•		
2 - Group Discussion - 25%	•		•	•		•	•			
3 - Written Assessment - 50%	•	•	•				•	•	•	

## Textbooks and Resources

### Textbooks

There are no required textbooks.

### IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Zoom Capacity (microphone required; webcam optional)

## Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)  
For further information, see the Assessment Tasks.

## Teaching Contacts

**Jane Fischer** Unit Coordinator  
[j.fischer@cqu.edu.au](mailto:j.fischer@cqu.edu.au)

## Schedule

### Week 1: Introduction to Population Health & Epidemiology - 06 Nov 2023

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	

### Week 2: Measuring the health of the population - 13 Nov 2023

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	<b>Assessment 2 week 2:</b> Online quizzes on week 1 learning material. Due on Monday 13/11/2023 at 11:59PM AEST <b>(Weighting: 5%)</b>

### Week 3: Descriptive Epidemiology Part 1 - 20 Nov 2023

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	<b>Assessment 2 week 3:</b> Online quizzes on week 2 learning material. Due on Monday 20/11/2023 at 11:59PM AEST <b>(Weighting: 5%)</b>

### Week 4: Descriptive Epidemiology Part 2 - 27 Nov 2023

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	<b>Assessment 2 week 4:</b> Online quizzes on week 3 learning material. Due on Monday 27/11/2023 at 11:59PM AEST <b>(Weighting: 5%)</b>

### Vacation Week - 04 Dec 2023

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings		

### Week 5: Measures and interpretation of association and causality - 11 Dec 2023

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	<b>Assessment 2 week 5:</b> Online quizzes on week 4 learning material. Due on Monday 11/12/2023 at 11:59PM AEST <b>(Weighting: 5%)</b>

### Week 6: Analytic Epidemiology Part 1 - 18 Dec 2023

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	<b>Assessment 2 week 6:</b> Online quizzes on week 5 learning material. Due on Monday 18/12/2023 at 11:59PM AEST <b>(Weighting: 5%)</b>

### Vacation Week - 25 Dec 2023

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings		

### Week 7: Analytic Epidemiology Part 2 - 01 Jan 2024

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	

### Week 8: Experimental Studies - 08 Jan 2024

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	<b>Assessment 1:</b> Poster. Due on Monday 8/01/2024 at 11:59 PM AEST ( <b>Weighting: 25%</b> )

### Week 9: Critical Appraisal of Epidemiological Studies - 15 Jan 2024

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	

### Week 10: Epidemiology of Social Determinants of Health - 22 Jan 2024

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	

### Week 11: Population Health Interventions - 29 Jan 2024

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	

### Week 12: Epidemiology in Practice - 05 Feb 2024

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	<b>Assessment 3:</b> Written Project Funding Application. Due on Friday 9/2/2024 at 11:59 pm AEST ( <b>Weighting: 50%</b> ) <b>Funding Application Assessment (50%)</b> Due: Week 12 Friday (9 Feb 2024) 11:59 pm AEST

### Exam Week - 12 Feb 2024

Module/Topic	Chapter	Events and Submissions/Topic
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## Assessment Tasks

### 1 Poster

#### Assessment Type

Presentation

#### Task Description

Task Description

In this assessment, you are asked to research, create, and develop a poster that describes the population health impact of one of the following health issues for the Australian population. You will need to source, interpret and communicate the current epidemiological evidence using appropriate measures. Your poster is due for upload onto the Moodle site in week 8 on **8/01/2024 at 11:59 PM** AEST.

Your poster needs to include

1. A clear introduction to the health issue that provides a clear definition and justification of why it

- is important.
2. The use of a range of appropriate epidemiological measures to critically demonstrate the impact this health issue has on:
    - the Australian population as a whole, and
    - within or between different population groups of relevance (differential impact). For example: age, gender, geographic location, occupation
  3. The use of data visualization that contributes to the effective communication of the issue.
  4. A clear and concise conclusion that links to the introduction and the contents of the poster.

The topics you can choose from are below. You can choose any topic that is of interest to you.

Work Area	Topic of Presentation
Health promotion	Rheumatic heart disease in Australia
Environmental health	Food-related Salmonella outbreaks in Australia
Oral health	Dental caries (tooth decay) in Australia among children aged 5-10 years
Occupational health & safety	Needle stick injury among Australian healthcare professionals
Alcohol, Tobacco and other Drugs	Smoking and lung cancer in Australia
Mental health	Mental health among Australian teenagers
Nutrition and food security	Food security and poverty in Australia

\* If you would like to examine a different topic (for example something related to your current work integrated learning unit or an area of interest related to your employment), please email the unit coordinator for approval before commencing work.

\*\*In your professional life, you will apply your knowledge of epidemiology to describe the impact of health outcomes, the patterns of disease, or the risks of a particular outcome in your work with clients, collaborators, or to the general public. This assessment is a practical application of that.

\*\*\* You can be as specific as you like about these topic. You could focus on a particular setting, population group, age etc. But this must be made clear from the onset of your poster.

#### Assessment Due Date

Due by 11:59 PM, Monday, 09/01/2023

#### Return Date to Students

Assessments will be returned 2 weeks after the submission date.

#### Weighting

25%

#### Assessment Criteria

Assessment Criteria

Relevance (30%)

- uses appropriate epidemiological terms
- examines issue at population level
- reflects on determinants beyond the individual
- uses appropriate evidence

Validity (40%)

- depth and range of evidence

- depth and extent of discussion of the evidence presented
- interprets epidemiological evidence accurately
- use of evidence to support statements

#### Organisation (10%)

- consideration of required components of the task- poster with visuals and texts, use of epidemiological evidence, data visualisations, conclusion
- clarification of statements or positions
- structure of presentation and logical flow of information
- coherence and clarity of expression (spelling, grammar, syntax)

#### Presentation (20%)

- style and formatting of visual aids
- typographical matters (types, font, etc.)
- referencing is consistent and in accordance with Harvard style
- length

#### Referencing Style

- [Harvard \(author-date\)](#)

#### Submission

No submission method provided.

#### Submission Instructions

Online - Students are to record and upload their presentation to Moodle.

#### Learning Outcomes Assessed

- Calculate and communicate epidemiological statistics relating to the measurement of health, wellness and disease.
- Interpret epidemiological data within theories and frameworks of social justice and cultural diversity for effective knowledge transfer and exchange.

#### Graduate Attributes

- Communication
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Ethical practice

## 2 Online Quizzes (25%)

#### Assessment Type

Group Discussion

#### Task Description

This assessment is divided into five parts. Parts 1 to 5 will involve completing weekly tutorial activities and quizzes online from week 2 to 6 (worth 25% of overall mark). Weekly tutorial activities and quizzes will be based on the materials covered in week 1 to 5 and will be due on a Monday of the follow week at 11:59 PM each week on the Moodle (e.g., week 2 tutorial activities and quizzes will be due on a Monday of week 3). These due dates are provided in the unit schedule. Students are encouraged to participate in online discussions on the Moodle site to learn from each other and to facilitate the completion of activities and quizzes.

#### Assessment Due Date

Weekly tutorial activities and quizzes (week 1 to 5) are due on a Monday of the following week at 11:59 PM on the Moodle.



## Return Date to Students

Weekly quizzes will be available after submission.

### Weighting

25%

### Assessment Criteria

#### Marking Criteria for Assessment Task 2:

If you answer a question correctly, you will be awarded the score assigned to that question. You can see the available score assigned to each question on the left pane of the question.

The maximum score you can receive per quiz if you answer all questions correctly is 5 marks. The marks you receive in each quiz will contribute toward your final grade for the unit. For example, if you score 3 out of 5 marks in quiz 1, this means that 3 marks will contribute toward your final grade in the unit. If you score 5 out of 5 on each of the five quizzes, you will have 25 marks contributing towards your final grade in this unit.

There is no partial response to a question - you can get a zero or the full mark assigned to a question. You must answer the question correctly to get a full mark assigned to a question.

The quizzes will not be timed and do not need to be completed in one sitting. You can work on it and come back next time to continue, but they must be completed within the assigned time frame.

You must click **Finished attempt** at the bottom of the quiz in the right corner to submit your responses.

You will be displayed the quiz scores along with the questions you answered correctly and those that you answered incorrectly.

You will be given feedback on all the answers immediately upon submission.

Good luck!

### Referencing Style

- [Harvard \(author-date\)](#)

### Submission

No submission method provided.

### Submission Instructions

Students are to complete their weekly quizzes online.

### Learning Outcomes Assessed

- Evaluate epidemiological investigations and sources of epidemiological data to identify inequities, enable change and advocate for health.
- Argue for a population health outcome using relevant research methods and approaches.
- Explain principles of data confidentiality and disclosure, and apply the ethical use of data.

### Graduate Attributes

- Communication
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence

## 3 Funding Application Assessment (50%)

### Assessment Type

Written Assessment

### Task Description

**In this assessment you will research and write an application for funding to support an evidence based intervention to improve population level health in relation to the issue you critically outlined in the poster presentation assessment 2. The organization you work for is applying for a grant to address the health outcome you examined in assessment 1. You are to complete an application requesting funding to conduct an evidence based population level intervention to improve population health in relation to your topic.**

**The application requires you to use an evaluation of relevant literature to propose an appropriate evidence based, contextually relevant approach that addresses the health issue. You are to research and identify evidence based approaches to address the health outcome of interest that are suitable for the context you are implementing it in. This is consistent with the goal of public health to ask not just "what works" but to address "what works for whom, under what circumstances, and how".**

The funding body has provided a template for the application with prescribed sections and word limits to explain your proposed project. You will need to source, interpret and communicate the current epidemiological evidence demonstrating your understanding of the different study types and how they support your claims. Your completed template, including your references, will need to be uploaded to the Moodle site.

**\*\*\*In your professional life, you may apply your knowledge of epidemiology to support applications for funding by your employer, either through grants or budget requests, to address health outcomes within your area. This assessment is a practical application of that scenario. You must get at least 50% in this assessment in order to pass this unit.**

### Assessment Due Date

Week 12 Friday (9 Feb 2024) 11:59 pm AEST

Due by 11:59 PM, Friday, 9/2/2024

### Return Date to Students

Assessments will be returned to students following certification of grades

### Weighting

50%

### Minimum mark or grade

50%

### Assessment Criteria

Assessment Criteria

Key Criteria	Below Expectations (Fail) below 50%	Meets Expectations (Pass) 50 - 64%	Meets Expectations (Credit) 65 - 74%	Exceeds Expectations (Distinction) 75 - 84%	Exceeds Expectations (High Distinction) 85 - 100%	Weighting
<b>Overview of project</b>	No topic, key points and/or purpose is introduced, no links to the body of the application, or it is unclear what the project will achieve.	Topic introduced, but the overview is underdeveloped in terms of key points, links to the body of the application and/or purpose of project.	Topic, key points and purpose of the project are introduced with clarity.	Topic, key points and purpose of the project are introduced in a clear and interesting way.	Topic, key points and purpose of the project are introduced in a clear and interesting way which captures the audience's attention.	10%
<b>Communication of ideas</b>	Does not clearly convey ideas, there are several spelling or grammatical errors, uses subjective or emotive descriptors and inappropriate style and tone.	Broadly conveys ideas but clarity would be improved by correcting errors, using appropriate academic style and tone.	Reasonably conveys ideas, may have one or two consistent spelling or grammatical errors, using mostly clear academic style and tone.	Conveys ideas logically, may have one or two consistent spelling or grammatical errors, using a clear academic style and tone.	Communicates ideas clearly and succinctly with no spelling or grammatical errors, using a well-developed academic style and tone.	15%
<b>Organisation of content</b>	Presents information in a poorly developed and illogical sequence inconsistent with the template, word limits not adhered to (too short; too long)	Presents information and ideas at a basic level of logical sequence consistent with the template and within the word limit but the audience generally finds it difficult to follow	Presents information and ideas at a reasonable level of logical sequence consistent with the template and within the word limit but the audience finds difficult to follow at times.	Presents information and ideas in a logical sequence consistent with the template and within the word limit which the audience can follow.	Uses the template structure and word limit well to present information and ideas in a logical and interesting sequence which the audience can easily follow.	10%
<b>Understanding and use of epidemiological data to provide background to the issue</b>	Poor interpretation or representation of epidemiological data. Just lists population findings, makes poor use of data, or focuses on individual aetiology of the health outcome.	Limited interpretation and representation of epidemiological data. Provides a broad description of the health issue at a population level.	Appropriate interpretation and representation of data to describe the health issue at a population level.	Appropriate interpretation and representation of epidemiological data to clearly identify patterns of health within and between populations.	Comprehensive interpretation and representation of epidemiological data to critically examine patterns of health within and between populations.	25%

<b>Reasoning and support for project</b>	Claims are typically unsupported assertions that lack sufficient supporting materials (explanations, examples, illustrations, statistics, or quotations from relevant authorities). Fails to develop arguments because of a lack of analysis. Credibility is weak due to lack of logical reasoning.	Claims are generally reasonable with variable levels of supporting materials (explanations, examples, illustrations, statistics, or quotations from relevant authorities). Arguments are under developed due to lack of analysis. Credibility is impacted due to lack of logical reasoning.	Claims are reasonable, and mostly supported using appropriate materials (explanations, examples, illustrations, statistics, or quotations from relevant authorities). The student is able to articulate arguments into the presentation. Student generally appears credible as a result of the logical reasoning.	Claims are reasonable, stated with relative clarity and supported with a variety of appropriate supporting materials (explanations, statistics, or quotations from relevant authorities). The student integrates their own analysis into the presentation. The student is seen as credible as a result of logical reasoning.	Claims are reasonable, clearly stated, and thoroughly explained with a combination of appropriate evidence and the student's own analysis. A variety of appropriate types of supporting materials (explanations, examples, illustrations, statistics, or quotations from relevant authorities) are used to develop ideas. The student establishes their credibility through use of logical reasoning and support.	30%
<b>Referencing</b>	Insufficient or inaccurate referencing.	Sufficient referencing with less than five inaccuracies or inconsistencies.	Sufficient and accurate referencing with less than five inconsistencies.	Accurate and sufficient use of a consistent format of referencing.	Accurate, sufficient, and effective use of references using a consistent format.	10%

### Referencing Style

- [Harvard \(author-date\)](#)

### Submission

No submission method provided.

### Learning Outcomes Assessed

- Calculate and communicate epidemiological statistics relating to the measurement of health, wellness and disease.
- Interpret epidemiological data within theories and frameworks of social justice and cultural diversity for effective knowledge transfer and exchange.
- Evaluate epidemiological investigations and sources of epidemiological data to identify inequities, enable change and advocate for health.
- Argue for a population health outcome using relevant research methods and approaches.
- Explain principles of data confidentiality and disclosure, and apply the ethical use of data.

### Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Cross Cultural Competence
- Ethical practice
- Social Innovation

## Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

### What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

### Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

### Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

### What can you do to act with integrity?



#### Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



#### Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



#### Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem