



# HLTH13031 *Population Health Epidemiology*

## Term 3 - 2022

Profile information current as at 05/05/2024 11:23 pm

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 - 2022

- 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. **Group Discussion**

Weighting: 25%

#### 2. **Presentation**

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 Unit evaluation

##### **Feedback**

Students provided a positive feedback about this unit. They felt supported in their learning.

##### **Recommendation**

Recommend to continue with the current approach employed in this unit

#### Feedback from Unit evaluation

##### **Feedback**

Some students found little value in the two weekly online forum post assessment. They thought the posts were repetitive.

##### **Recommendation**

Recommend to identify other ways of engaging students in group work as opposed to online discussions post assessments. Perhaps to use group presentation on a given topic or do critique of an article as part of the group work.

#### Feedback from UC observation

##### **Feedback**

Although many students showed interest in this unit, they did not participate in the online group discussions. Many students contributed posts purely for the sake of assessment requirements. Several attempts were made to engage students through posts and probing them to respond but to no avail.

##### **Recommendation**

Recommend students be assigned to a group and asked to critique a given article as a group every two weeks or to make a presentation summarizing a given article as a group every two weeks. If the individual component of the online assessment post is important, it is commended students be asked to identify their own articles so that the posts are not repetitive.

## 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	•	•	•	•	•
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

HLTH13031

#### Prescribed

#### Introduction to Epidemiology

Edition: 8 (2019)

Authors: Ray M. Merrill

Jones & Bartlett Learning, LLC

ISBN: 9781284170719

Binding: eBook

### 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

**William Mude** Unit Coordinator

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**Tomas Megalaa** Unit Coordinator

[t.megalaa@cqu.edu.au](mailto:t.megalaa@cqu.edu.au)

## Schedule

### Week 1: Introduction to Population Health & Epidemiology - 07 Nov 2022

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

### Week 2: Measuring the health of the population - 14 Nov 2022

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	<b>Assessment 1 week 2:</b> Online quizzes on week 1 learning material. Due on Monday 14/11/2022 at 11:59PM AEST <b>(Weighting: 5%)</b>

### Week 3: Descriptive Epidemiology Part 1 - 21 Nov 2022

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	<b>Assessment 1 week 3:</b> Online quizzes on week 2 learning material. Due on Monday 21/11/2022 at 11:59PM AEST <b>(Weighting: 5%)</b>

**Week 4: Descriptive Epidemiology Part 2 - 28 Nov 2022**

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	<b>Assessment 1 week 4:</b> Online quizzes on week 3 learning material. Due on Monday 28/11/2022 at 11:59PM AEST <b>(Weighting: 5%)</b>

**Vacation Week - 05 Dec 2022**

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings		

**Week 5: Measures and interpretation of association and causality - 12 Dec 2022**

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	<b>Assessment 1 week 5:</b> Online quizzes on week 4 learning material. Due on Monday 12/12/2022 at 11:59PM AEST <b>(Weighting: 5%)</b>

**Week 6: Analytic Epidemiology Part 1 - 19 Dec 2022**

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	<b>Assessment 1 week 6:</b> Online quizzes on week 5 learning material. Due on Monday 19/12/2022 at 11:59PM AEST <b>(Weighting: 5%)</b>

**Vacation Week - 26 Dec 2022**

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings		

**Week 7: Analytic Epidemiology Part 2 - 02 Jan 2023**

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

**Week 8: Experimental Studies - 09 Jan 2023**

Module/Topic	Chapter	Events and Submissions/Topic
Selected readings	See eReading list on the Moodle site	<b>Assessment 2:</b> Poster pitching a funding application idea. Due on Monday 09/01/2023 at 11:59 PM AEST <b>(Weighting: 25%)</b>  <b>Poster</b> Due: Week 8 Monday (9 Jan 2023) 11:59 pm AEST

**Week 9: Critical Appraisal of Epidemiological Studies - 16 Jan 2023**

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

**Week 10: Epidemiology of Social Determinants of Health - 23 Jan 2023**

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

**Week 11: Population Health Interventions - 30 Jan 2023**

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

## Week 12: Epidemiology in Practice - 06 Feb 2023

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 12/02/2023 at 11:59 pm AEST ( <b>Weighting: 50%</b> )  <b>Funding Application Assessment (50%)</b> Due: Week 12 Friday (10 Feb 2023) 11:59 pm AEST
Exam Week - 13 Feb 2023		
Module/Topic	Chapter	Events and Submissions/Topic

## Assessment Tasks

### 1 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

No Assessment Criteria

#### 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

## 2 Poster

### Assessment Type

Presentation

### Task Description

#### Task Description

In this assessment you are asked to research, create, and a poster that describes the population health impact for 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

**Monday 09/1/2023 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 Australians 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

Week 8 Monday (9 Jan 2023) 11:59 pm AEST

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

### Return Date to Students

Week 9 Friday (20 Jan 2023)

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

### 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 (10 Feb 2023) 11:59 pm AEST

Due by 11:59 PM, Friday, 10/02/2023

**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

Relevance (30%)

- relevance of responses to questions
- 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
- strength of funding application, based on critical thought, analysis of the evidence and synthesis of new ideas

**Organization (20%)**

- quality of consideration of the required components of task- all questions answered fully
- structure and flow of information
- coherence and clarity of expression (spelling, grammar, syntax)

Presentation (10%)

- style and formatting of funding application
- typographical matters (types, font, etc.)
- referencing is consistent and in accordance with Harvard style
- within word count according to funding application template

**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