



HLTH13031 Population Health Epidemiology

Term 3 - 2021

Profile information current as at 01/07/2022 03:36 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 - 2021

- 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 and discussion

Feedback

Revision of materials and assessments.

Recommendation

In addition to the proposed revision of the alignment and weighting of the assessment items in this unit, the unit contents need to change. The current Unit Coordinator concurs with the previous unit coordinator "that it is possible for students to pass the unit without displaying mastery of some fundamental concepts" in epidemiology. A revision of the unit content and alignment with the course outcomes will be undertaken over the 2021 T3 period, to take effect from 2022 T1.

Feedback from Personal reflection

Feedback

Tutorial

Recommendation

Although tutorials are scheduled, many students do not attend them. It might be useful to offer drop in tutorial sessions so more resources can be directed at helping students online on Moodle and one on one support where needed.

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

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

Sarah Mcnicol Unit Coordinator

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Lisa Bricknell Unit Coordinator

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Schedule

Week 1: Introduction to Population Health & Epidemiology - 08 Nov 2021

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------|---------|------------------------------|
| Selected readings | | |

Week 2: Measuring health outcome frequency - 15 Nov 2021

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------|---------|------------------------------|
| Selected readings | | |

Week 3: Measures of function, summary measures of health, and measuring determinants of health - 22 Nov 2021

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------|---------|------------------------------|
| Selected readings | | |

Week 4: Descriptive Epidemiology - 29 Nov 2021

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------|---------|------------------------------|
| Selected readings | | |

Vacation Week - 06 Dec 2021

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------|---------|------------------------------|
| Selected readings | | |

Week 5: Measuring and Interpreting Association and Effect - 13 Dec 2021

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------|---------|--|
| Selected readings | | |
| | | Group Discussion (25%) Due: Week 5 Friday (17 Dec 2021) 11:45 pm AEST |

Week 6: Analytic Epidemiology - 20 Dec 2021

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------|---------|---|
| Selected readings | | |
| | | Presentation (25%) Due: Week 6 Monday (20 Dec 2021) 9:00 am AEST |

Vacation Week - 27 Dec 2021

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|---------|------------------------------|
|--------------|---------|------------------------------|

Week 7: Intervention Epidemiology - 03 Jan 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------|---------|------------------------------|
| Selected readings | | |

Week 8: Qualitative epidemiology - 10 Jan 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------|---------|------------------------------|
| Selected readings | | |

Week 9: Evaluation Studies and Evidence Synthesis - 17 Jan 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------|---------|------------------------------|
| Selected readings | | |

Week 10: Population Health Prevention Strategies - 24 Jan 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------|---------|------------------------------|
| Selected readings | | |

Week 11: Complexity and wicked problems in population health - 31 Jan 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------|---------|------------------------------|
| Selected readings | | |

Week 12: Epidemiology in Practice - 07 Feb 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------|---------|---|
| Selected readings | | Funding Application Assessment (50%) Due: Week 12 Friday (11 Feb 2022) 11:45 pm AEST |

Exam Week - 14 Feb 2022

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|---------|------------------------------|
|--------------|---------|------------------------------|

Assessment Tasks

1 Presentation (25%)

Assessment Type

Presentation

Task Description

Task Description

In this assessment you are asked to research, create, and record a 10 minute oral presentation (using Zoom) 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 presentation will need to be recorded and uploaded to the Moodle site as well as a copy of your slides and notes by **9am Monday, of week 6 (20/12/2021)**.

Your presentation 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 presentation.

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 | The patterns and impact of obesity and overweight in Australian children (0-17 years old) |
| Environmental health | Cases of cryptosporidiosis outbreaks related to public swimming pool in Australia |

| | |
|------------------------------|---|
| Oral health | Patterns and impact of oral cancers in adult (aged 15 +) Australians |
| Occupational health & safety | Patterns and impacts of work related traumatic joint/ligament and muscle/tendon injury in Australia |
| Drugs and alcohol | The patterns and impact of injecting drug use in Australian youths |
| Mental health | The patterns and impact of mental health issues in Australians living in regional and remote areas |
| Nutrition and food security | The patterns and impact of nutrient intakes and food practices in Australian youth |

* 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.

Assessment Due Date

Week 6 Monday (20 Dec 2021) 9:00 am AEST

Return Date to Students

Week 8 Monday (10 Jan 2022)

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- presentation recorded with visuals and narration, 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%)

- eye contact, fluency of narration, use of pauses, clarity and expressivity of voice
- 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 Group Discussion (25%)

Assessment Type

Group Discussion

Task Description

Tutorials allow students to develop and practice their skills in applying epidemiological and population health concepts consistent with how they will as health professionals. It fosters the development of oral and written skills, as well as group skills such as interaction and cooperation in a multi-disciplinary environment. It allows students the opportunity to reflect on issues and applications of concepts from other learning resources and demonstrate their understanding in their interactions and submitted work. Student also have the opportunity to develop respect and consideration for other's points of view as well as the capacity to critique responses from their peers in a collegial and supportive environment. Each week students will have the opportunity to discuss and then complete a series of structured tutorial tasks applying the epidemiological concepts and study designs learnt that week. A Zoom drop-in session will be held each week from week 2 for those students who prefer oral discussion. Students who cannot attend the tutorial or prefer written discussion will have a forum for peer discussion and guidance in completing the activities. Students will submit five of the activities from throughout the term for assessment. Three of these will be compulsory and two can be chosen by the student. Two activities from weeks 1 to 5 will be submitted for assessment on Friday in Week 5 by 11:45 PM (QLD Time) and the other three will be submitted for summative assessment in Week 12 on Monday by 11:45 PM (QLD Time). These will be worth 10% and 15% of the overall mark respectively.

Assessment Due Date

Week 5 Friday (17 Dec 2021) 11:45 pm AEST

Two activities from weeks 1 to 5 will be submitted for assessment by 11:45 PM (QLD Time) on Friday of Week 5 and the other three will be submitted for assessment on Monday of Week 12 by 11:45 PM (QLD Time).

Return Date to Students

Week 8 Friday (14 Jan 2022)

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
- draws appropriate conclusions based on critical thought, analysis of the evidence and synthesis of new ideas

Organisation (20%)

- quality of consideration of the required components of task- mandatory topics submitted, minimum number of optional topics submitted, all questions answered
- takes time, when appropriate to clarify a statement or position
- structure and flow of information
- coherence and clarity of expression (spelling, grammar, syntax)

Presentation (10%)

- style and formatting of report
- 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 collate the activities into a single Microsoft Word file for uploading to Moodle.

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 assessment 1 (presentation). 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 public 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 (11 Feb 2022) 11:45 pm AEST

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

Organisation (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