

ESSC11002 *Measurement and Evaluation in Health Science*

Term 3 - 2025

Profile information current as at 21/04/2026 08:51 pm

All details in this unit profile for ESSC11002 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

In Measurement and Evaluation in Health Science you will study and explore a range of experimental designs and statistical analyses appropriate to investigations in a wide range of fields. This unit will introduce you to both parametric and non-parametric statistical methods that will allow you to be informed, evaluate the credibility and usefulness of information, and make appropriate decisions about research data. This is a practical unit that will develop your skills in the use of statistical software to organise, analyse and report statistical outcomes.

Details

Career Level: *Undergraduate*

Unit Level: *Level 1*

Credit Points: *6*

Student Contribution Band: *10*

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 3 - 2025

- Cairns
- Mackay City
- Online
- Rockhampton

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. Online Quiz(zes)

Weighting: 30%

2. Written Assessment

Weighting: 70%

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 Student feedback

Feedback

Assessment questions are clearly linked to lecture content, keeping this format aids student learning.

Recommendation

It is recommended that the unit coordinator should attempt to maintain a clear link between lecture content and assessment requirements.

Feedback from Self-reflection

Feedback

Online quizzes had to be removed from the assessment tasks to meet an updated external accreditation requirement. An attempt should be made to ensure the new assessment format follows a logical progression of the statistical abilities presented during the unit.

Recommendation

It is recommended that the unit coordinator attempt to create novel assessments that match the knowledge presented to students during the unit.

Feedback from Student feedback

Feedback

The unit coordinator was enthusiastic, relatable, and kept lectures interesting while speaking about statistics which helped students retain information presented in class.

Recommendation

It is recommended that the unit coordinator attempt to maintain an engaging learning environment.

Unit Learning Outcomes

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

1. Identify fundamental statistical terminology and theory
2. Demonstrate knowledge and ability in collating, organising and displaying research data
3. Utilise descriptive and inferential statistics to inform appropriate decision making
4. Apply statistical software to analyse, manage and describe statistical outcomes

Alignment of Learning Outcomes, Assessment and Graduate Attributes

— N/A Level ● Introductory Level ● Intermediate Level ● Graduate Level ◦ Professional Level ◦ Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
1 - Online Quiz(zes) - 30%	●	●	●	
2 - Written Assessment - 70%	●	●	●	●

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4
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 - First Nations Knowledges				
11 - 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	11	
1 - Online Quiz(zes) - 30%	•	•	•									
2 - Written Assessment - 70%	•	•	•	•		•						

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)
- Word
- Excel
- Jamovi (free statistics analysis program)
- Paint

Referencing Style

All submissions for this unit must use the referencing style: [American Psychological Association 7th Edition \(APA 7th edition\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Rogan Bartlett Unit Coordinator

r.bartlett@cqu.edu.au

Schedule

Week 1 - 10 Nov 2025

Module/Topic	Chapter	Events and Submissions/Topic
Lecture: Unit introduction and Fundamentals of Statistics Lab: Entering and manipulating data using Excel	Introduction to Statistics pages 231-234	

Week 2 - 17 Nov 2025

Module/Topic	Chapter	Events and Submissions/Topic
Lecture: Fundamentals of Statistics Continued Lab: Introduction to Jamovi	Introduction to Statistics pages 10-28, 34-39, 131-135	

Week 3 - 24 Nov 2025

Module/Topic	Chapter	Events and Submissions/Topic
Lecture: The Bell Curve and the Importance of Random Sampling Lab: Checking Data for Normality	Introduction to Statistics pages 44-51	

Week 4 - 01 Dec 2025

Module/Topic	Chapter	Events and Submissions/Topic
Lecture: Understanding Significance Testing Lab: APA Formatting and When to Use Tables and Figures in Research	Introduction to Statistics pages 222-224, 235-237, 238-241	Online Quiz 1 Opens: Week 4 Friday (5 December 2025) 5:00 PM AEST

Week 5 - 08 Dec 2025

Module/Topic	Chapter	Events and Submissions/Topic
Lecture: Pearson's Product Moment Correlation Lab: Understanding Pearson's Correlations	Introduction to Statistics pages 164-174	Online Quiz 1 Closes: Week 5 Friday (12 December 2025) 5:00 PM AEST

Week 6 - 15 Dec 2025

Module/Topic	Chapter	Events and Submissions/Topic
Lecture: Bringing the Scientific Method and Statistics Together Lab: No lab	Introduction to Statistics pages 337-355, 369-376, 375-389	Written Assessment Part A Due: Week 6 Tuesday (16 December 2025) 5:00 PM AEST

Vacation Week - 22 Dec 2025

Module/Topic	Chapter	Events and Submissions/Topic

Vacation Week - 29 Dec 2025

Module/Topic	Chapter	Events and Submissions/Topic

Week 7 - 05 Jan 2026

Module/Topic	Chapter	Events and Submissions/Topic

Lecture: Dependent t-tests
Lab: Understanding Dependent t-tests

Week 8 - 12 Jan 2026

Module/Topic	Chapter	Events and Submissions/Topic
Lecture: Independent t-tests Lab: Understanding Independent t-tests	Introduction to Statistics pages 406-411	Online Quiz 2 Opens: Week 8 Friday (16 January 2026) 5:00 PM AEST

Week 9 - 19 Jan 2026

Module/Topic	Chapter	Events and Submissions/Topic
Lecture: Within group ANOVAs Lab: Understanding Within Group ANOVA		Online Quiz 2 Closes: Week 9 Friday (23 January 2026) 5:00 PM AEST

Week 10 - 26 Jan 2026

Module/Topic	Chapter	Events and Submissions/Topic
Lecture: Between group ANOVAs Lab: Understanding Between Group ANOVA		Online Quiz 3 Opens: Week 10 Friday (30 January 2026) 5:00 PM AEST

Week 11 - 02 Feb 2026

Module/Topic	Chapter	Events and Submissions/Topic
Lecture: RM ANOVAs Lab: Understanding RM ANOVA		Online Quiz 3 Closes: Week 11 Friday (6 February 2026) 5:00 PM AEST

Week 12 - 09 Feb 2026

Module/Topic	Chapter	Events and Submissions/Topic
Lecture: No Lecture Lab: No lab		Written Assessment Part B Due: Week 12 Tuesday (10 February 2026) 5:00 PM AEST

Review/Exam Week - 16 Feb 2026

Module/Topic	Chapter	Events and Submissions/Topic

Exam Week - 16 Feb 2026

Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 Online Quizzes

Assessment Type

Online Quiz(zes)

Task Description

There will be three (3) online quizzes comprised of multiple-choice questions. Each online quiz is to be completed on your own, using resources presented in this class. You are responsible for logging into Moodle and completing each online quiz while each online quiz is available. In the absence of an approved extension no late submissions will be allowed for any of the online quizzes that comprise this assessment item. Each online quiz must be completed in a single session (i.e., once you open an online quiz you will not be able to open it again) and you only have one (1) attempt on each online quiz. Online quizzes should be completed on a computer as attempting the quiz on a smartphone can result in your session being ended in the event of a phone call or notification.

The 72-hour grace period does not apply to this assessment item.

Online Quiz 1 (10% of final grade)

This quiz will cover unit content including lectures, labs, and readings from weeks 1-4. It is your responsibility to log into Moodle and complete the quiz within the given time period.

Opens: Week 4 Friday (5 December 2025) 5:00 PM AEST

Closes: Week 5 Friday (12 December 2025) 5:00 PM AEST

Online Quiz 2 (10% of final grade)

This quiz will cover unit content including lectures, labs, and readings from weeks 1-8. It is your responsibility to log into

Moodle and complete the quiz within the given time period.

Opens: Week 8 Friday (16 January 2026) 5:00 PM AEST

Closes: Week 9 Friday (23 January 2026) 5:00 PM AEST

Online Quiz 3 (10% of final grade)

This quiz will cover unit content including lectures, labs, and readings from weeks 1-10. It is your responsibility to log into Moodle and complete the quiz within the given time period.

Opens: Week 10 Friday (30 January 2026) 5:00 PM AEST

Closes: Week 11 Friday (6 February 2026) 5:00 PM AEST

Level of GenAI use allowed:

Level 1: No AI. This assessment item must be completed entirely without AI assistance, ensuring that students rely solely on their existing knowledge, understanding, and skills.

Number of Quizzes

3

Frequency of Quizzes

Other

Assessment Due Date

The three (3) Online Quizzes will be administered at various timepoints as described in the task description.

Return Date to Students

Results for each Online Quiz will be available to students after the each quiz closes.

Weighting

30%

Assessment Criteria

Questions will be graded as correct or incorrect via the Moodle online quiz system. All quiz questions are equally weighted.

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

Submission

Online

Learning Outcomes Assessed

- Identify fundamental statistical terminology and theory
- Demonstrate knowledge and ability in collating, organising and displaying research data
- Utilise descriptive and inferential statistics to inform appropriate decision making

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking

2 Written Assessment

Assessment Type

Written Assessment

Task Description

This assessment task is composed of two parts: Part A and Part B.

Written Assessment Part A

Due date: Week 6 Tuesday (16 December 2025) 5:00 PM AEST

Weighting: 30% of overall grade

Description: Written Assessment Part A will cover unit content including lectures, labs, and readings from Weeks 1-5.

Questions will assess your understanding of unit content (e.g., why is random sampling important?) and your ability to work with data (e.g., correctly set up a data sheet, or given a set of data run the proper analysis and properly interpret the results). Submit your answers to the assessment questions on the Word document provided to you on Moodle. Do not change the provided template (e.g., move or remove the rubrics) and keep all text provided in red font. Type your answers using black font. Put your name and student number on the top of the first page of your assessment.

Plagiarism: The assessment submission will be checked for plagiarism. You are advised to familiarise yourself with CQUniversity's Academic Integrity Policy and Procedure. Any assessments suspected of plagiarism or any other type of academic misconduct will be addressed in accordance to the relevant policies noted in the unit profile.

Word count: If applicable a word count will be provided for the specific question. Words exceeding the word count will not be read.

References: References are not required as questions should be answered using unit content.

Extensions: Extensions will only be granted in accordance with CQUniversity policy. Extensions must be submitted through Moodle.

Late submissions: Assessments submitted late will incur penalties in accordance with CQUniversity policy.

File submission: Upload your file (answers) in a Word format (.doc or .docx). The instructor must receive an acceptable file that is readable. If an unacceptable/corrupt file is submitted your assessment will be considered late until an acceptable file is submitted. Late penalties will be incurred in accordance with CQUniversity policy.

Level of GenAI use allowed:

Level 1: No AI. This assessment item must be completed entirely without AI assistance, ensuring that students rely solely on their existing knowledge, understanding, and skills.

Written Assessment Part B

Due date: Week 12 Tuesday (10 February 2026) 5:00 PM AEST

Weighting: 40% of overall grade

Description: Written Assessment Part B will cover unit content including lectures, labs, and readings from Weeks 1-12. Questions will assess your understanding of unit content and your ability to work with data. Submit your answers to the assessment questions on the Word document provided to you on Moodle. Do not change the provided template (e.g., move or remove the rubrics) and keep all text provided in red font. Type your answers using black font. Put your name and student number on the top of the first page of your assessment.

Plagiarism: The assessment submission will be checked for plagiarism. You are advised to familiarise yourself with CQUniversity's Academic Integrity Policy and Procedure. Any assessments suspected of plagiarism or any other type of academic misconduct will be addressed in accordance to the relevant policies noted in the unit profile.

Word count: If applicable a word count will be provided for the specific question. Words exceeding the word count will not be read.

References: References are not required as questions should be answered using unit content.

Extensions: Extensions will only be granted in accordance with CQUniversity policy. Extensions must be submitted through Moodle.

Late submissions: Assessments submitted late will incur penalties in accordance with CQUniversity policy.

File submission: Upload your file (answers) in a Word format (.doc or .docx). The instructor must receive an acceptable file that is readable. If an unacceptable/corrupt file is submitted your assessment will be considered late until an acceptable file is submitted. Late penalties will be incurred in accordance with CQUniversity policy.

Level of GenAI use allowed:

Level 1: No AI. This assessment item must be completed entirely without AI assistance, ensuring that students rely solely on their existing knowledge, understanding, and skills.

Assessment Due Date

Written Assessment Part A: Week 6 Tuesday at 5:00 PM AEST; Written Assessment Part B: Week 12 Tuesday at 5:00 PM AEST

Return Date to Students

Written Assessment Part A: Week 8 Friday at 5:00 PM AEST; Written Assessment Part B: Exam Week Friday at 5:00 PM AEST

Weighting

70%

Assessment Criteria

Points will be awarded on your ability to correctly answer the assessment questions. Points will not be allocated to sections that are plagiarised in accordance with CQUniversity policy. A detailed marking rubric is available on Moodle.

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

Submission

Online

Learning Outcomes Assessed

- Identify fundamental statistical terminology and theory
- Demonstrate knowledge and ability in collating, organising and displaying research data
- Utilise descriptive and inferential statistics to inform appropriate decision making
- Apply statistical software to analyse, manage and describe statistical outcomes

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking

- Information Literacy
- Information Technology Competence

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