



MHHS8004

Research Methodology and Analysis

Session 2, In person-scheduled-weekday, North Ryde 2026

Medicine, Health and Human Sciences Faculty level units

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General Information

Unit convenor and teaching staff

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Credit points

10

Prerequisites

Corequisites

Co-badged status

Unit description

In this unit you will explore advanced practice in data analysis related to the research problems faced in your field of study. You will learn about the fundamentals of reproducible science using case studies that illustrate various practices. You will review different research data, and explore best practice in preparing it for reports and publications. You will learn about experimental design and methodology relevant to your research discipline; including data analytics and statistical analysis, and digital tools that support your research.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <https://www.mq.edu.au/study/calendar-of-dates>

Learning Outcomes

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

ULO1: Critically review research methodologies and justify analytical approaches to interpret data.

ULO2: Critique and apply theories and methodologies underpinning analytical approaches for advanced research data.

ULO3: Explain complex research concepts and ideas using discipline-specific language.

ULO4: Present clearly articulated analysis of data from your selected research discipline.

Assessment Tasks

Name	Weighting	Hurdle	Due	Groupwork/Individual	Short Extension	AI Approach
Data analysis quiz	25%	No	Week 8	Individual	No	Observed
Presentation of data analysis strategy	35%	No	Week 10	Individual	No	Observed
Data Analysis Report	40%	No	16/11/2026	Individual	Yes	Open

Data analysis quiz

Assessment Type ¹: Examination

Indicative Time on Task ²: 15 hours

Due: **Week 8**

Weighting: **25%**

Groupwork/Individual: Individual

Short extension ³: No

AI Approach: Observed

This quiz will focus specifically on what you have learnt about research data analysis.

On successful completion you will be able to:

- Critically review research methodologies and justify analytical approaches to interpret data.
- Critique and apply theories and methodologies underpinning analytical approaches for advanced research data.

Presentation of data analysis strategy

Assessment Type ¹: Presentation task

Indicative Time on Task ²: 35 hours

Due: **Week 10**

Weighting: **35%**

Groupwork/Individual: Individual

Short extension ³: No

AI Approach: Observed

You will present your data analysis strategy for a case you have chosen from your discipline area.

On successful completion you will be able to:

- Critically review research methodologies and justify analytical approaches to interpret data.
- Critique and apply theories and methodologies underpinning analytical approaches for advanced research data.
- Explain complex research concepts and ideas using discipline-specific language.
- Present clearly articulated analysis of data from your selected research discipline.

Data Analysis Report

Assessment Type ¹: Written Submission

Indicative Time on Task ²: 35 hours

Due: **16/11/2026**

Weighting: **40%**

Groupwork/Individual: Individual

Short extension ³: Yes

AI Approach: Open

You will analyse data from your discipline and present in a report also outlining your approach.

On successful completion you will be able to:

- Critically review research methodologies and justify analytical approaches to interpret data.
- Critique and apply theories and methodologies underpinning analytical approaches for advanced research data.
- Explain complex research concepts and ideas using discipline-specific language.
- Present clearly articulated analysis of data from your selected research discipline.

¹ If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- [Academic Success](#) for academic skills support.

² Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation.

³ An automatic short extension is available for some assessments. Apply through the [Service Connect Portal](#).

Delivery and Resources

As a student enrolled in this unit, you will engage in a range of online and face-to-face learning activities, including readings, online modules, tutorials, practicals, videos and lectures. Details

can be found on the iLearn site for this unit.

Recommended Readings

Recommended reading will be provided in the weekly material on the iLearn site for this unit.

Technology Used

Active participation in the learning activities throughout the unit will require students to have access to a tablet, laptop or similar device. Students who do not own their own laptop computer may borrow one from the university library.

Unit Schedule

A detailed Unit schedule is available on the Unit iLearn site.

Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central](https://policies.mq.edu.au) (<https://policies.mq.edu.au>). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- [Academic Appeals Policy](#)
- [Academic Integrity Policy](#)
- [Academic Progression Policy](#)
- [Assessment Policy](#)
- [Fitness to Practice Procedure](#)
- [Assessment Procedure](#)
- [Complaints Resolution Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#)

Students seeking more policy resources can visit [Student Policies](https://students.mq.edu.au/support/study/policies) (<https://students.mq.edu.au/support/study/policies>). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit [Policy Central](https://policies.mq.edu.au) (<https://policies.mq.edu.au>) and use the [search tool](#).

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: <https://students.mq.edu.au/admin/other-resources/student-conduct>

Results

Results published on platform other than [eStudent](#), (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the

University. Once approved, final results will be sent to your student email address and will be made available in [eStudent](#). For more information visit connect.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Academic Integrity

At Macquarie, we believe [academic integrity](#) – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free [online writing and maths support](#), [academic skills development](#) and [wellbeing consultations](#).

Student Support

Macquarie University provides a range of support services for students. For details, visit <http://students.mq.edu.au/support/>

Academic Success

[Academic Success](#) provides resources to develop your English language proficiency, academic writing, and communication skills.

- [Ask a Study Coach](#)
- [Access StudyWISE](#)
- [Upload an assignment to Studiosity](#)
- [Complete the Academic Integrity Module](#)

The Library provides online and face to face support to help you find and use relevant information resources.

- [Subject and Research Guides](#)
- [Ask a Librarian](#)

Student Services and Support

Macquarie University offers a range of [Student Support Services](#) including:

- [IT Support](#)
- [Accessibility and disability support](#) with study
- Mental health [support](#)
- [Safety support](#) to respond to bullying, harassment, sexual harassment and sexual assault
- [Social support including information about finances, tenancy and legal issues](#)
- [Student Advocacy](#) provides independent advice on MQ policies, procedures, and processes

Student Enquiries

Got a question? Ask us via the [Service Connect Portal](#), or contact [Service Connect](#).

IT Help

For help with University computer systems and technology, visit <https://students.mq.edu.au/support/technology/service-desk>.

When using the University's IT, you must adhere to the [Acceptable Use of IT Resources Policy](#). The policy applies to all who connect to the MQ network including students.

Unit information based on version 2026.02 of the [Handbook](#)