

MEDI7002

Research Data Analysis

Session 2, In person-scheduled-weekday, North Ryde 2024

Medicine, Health and Human Sciences Faculty level units

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General Information

Unit convenor and teaching staff

Unit Convenor

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Credit points

10

Prerequisites

Admission to BPhil/MRes

Corequisites

Co-badged status

Unit description

In this unit you will explored advanced practices 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 theory relevant to your research discipline; including data analytics and statistical analysis, and digital tools that support your research. This unit will equip you for analysing your research outcomes in your MRes2 project.

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 data and define 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.

General Assessment Information

Grade descriptors and other information concerning grading are contained in the Macquarie University Assessment Policy.

All final grades are determined by a grading committee, in accordance with the Macquarie University Assessment Policy, and are not the sole responsibility of the Unit Convenor.

Students will be awarded a final grade and a mark which must correspond to the grade descriptors specified in the Assessment Procedure (clause 128).

To pass this unit, you must demonstrate sufficient evidence of achievement of the learning outcomes, meet any ungraded requirements, and achieve a final mark of 50 or better.

Further details for each assessment task will be available on iLearn.

Late Submissions

Unless a Special Consideration request has been submitted and approved, a 5% penalty (OF THE TOTAL POSSIBLE MARK) will be applied each day a written assessment is not submitted, up until the 7th day (including weekends). After the 7th day, a grade of '0' will be awarded even if the assessment is submitted. Submission time for all written assessments is set at 11.55pm. A 1-hour grace period is provided to students who experience a technical concern.

For example:

| Number of days (hours) late | Total Possible Marks | Deduction | Raw mark | Final mark |
|-----------------------------|----------------------|-----------|----------|------------|
| 1 day (1-24 hours) | 100 | 5 | 75 | 70 |
| 2 days (24-48 hours) | 100 | 10 | 75 | 65 |
| 3 days (48-72 hours) | 100 | 15 | 75 | 60 |
| 7 days (144-168 hours) | 100 | 35 | 75 | 40 |
| >7 days (>168 hours) | 100 | - | 75 | 0 |

For any late submissions of time-sensitive tasks, such as scheduled tests/exams, performance assessments/presentations, and/or scheduled practical assessments/labs, students need to submit an application for Special Consideration.

Assessment Tasks

| Name | Weighting | Hurdle | Due |
|--|-----------|--------|----------------------------------|
| Data analysis quiz | 25% | No | Week 2 [Part A]; Week 6 [Part B] |
| Presentation of data analysis strategy | 35% | No | Week 11, 14/10/2024, 1pm |
| Data Analysis Report | 40% | No | Week 13, 28/10/2024, 11.55pm |

Data analysis quiz

Assessment Type 1: Quiz/Test Indicative Time on Task 2: 15 hours

Due: Week 2 [Part A]; Week 6 [Part B]

Weighting: 25%

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

On successful completion you will be able to:

- Critically review research data and define 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 Indicative Time on Task 2: 35 hours

Due: Week 11, 14/10/2024, 1pm

Weighting: 35%

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 data and define 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: Report Indicative Time on Task 2: 35 hours Due: Week 13, 28/10/2024, 11.55pm

Weighting: 40%

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 data and define 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.

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- · the Writing Centre for academic skills support.

Delivery and Resources

As a student enrolled in this unit, you will engage in a range of online and face-to-face learning

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

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

activities, including readings, online modules, tutorials, practicals, videos and lectures. Details can be found on the iLearn site for this unit.

Recommended Readings

There is no textbook for this unit. Some recommended reading is 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). 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 <u>Student Policies</u> (<u>https://students.mq.edu.au/support/study/policies</u>). 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.e du.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 ask.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Academic Integrity

At Macquarie, we believe <u>academic integrity</u> – 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 <u>online writing and maths support</u>, 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/

The Writing Centre

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- · Chat with a WriteWISE peer writing leader
- 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
- <u>Safety support</u> 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 AskMQ, or contact Service Connect.

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/ offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.

Unit information based on version 2024.02 of the Handbook