



# MEDI2900

## Introduction to Medical Research

Session 3, Weekday attendance, North Ryde 2021

*Department of Biomedical Sciences*

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#### **Disclaimer**

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#### **Session 2 Learning and Teaching Update**

The decision has been made to conduct study online for the remainder of Session 2 for all units WITHOUT mandatory on-campus learning activities. Exams for Session 2 will also be online where possible to do so.

This is due to the extension of the lockdown orders and to provide certainty around arrangements for the remainder of Session 2. We hope to return to campus beyond Session 2 as soon as it is safe and appropriate to do so.

Some classes/teaching activities cannot be moved online and must be taught on campus. You should already know if you are in one of these classes/teaching activities and your unit convenor will provide you with more information via iLearn. If you want to confirm, see the list of [units with mandatory on-campus classes/teaching activities](#).

Visit the [MQ COVID-19 information page](#) for more detail.

## General Information

Unit convenor and teaching staff

Unit convenor

Mark Butlin

[mark.butlin@mq.edu.au](mailto:mark.butlin@mq.edu.au)

Contact via E-mail

Level 1, 75 Talavera Road

By appointment.

Practical co-ordinator

Julie Atkin

[julie.atkin@mq.edu.au](mailto:julie.atkin@mq.edu.au)

Contact via E-mail

Level 1, 75 Talavera Road

By appointment.

Credit points

10

Prerequisites

40cp at 1000 level or above

Corequisites

Co-badged status

Unit description

Through this unit, you will begin to develop the required knowledge and skills to participate in basic research in the field of health or biomedical science. You will learn about the importance of appropriate research notetaking and record keeping. Building upon this, you will learn about widely used research methodology and gain an appreciation for the translational capacity of medical research. You will be provided the opportunity to develop your skills in research planning and communication, in preparation for future studies that integrate research within your learning.

## Important Academic Dates

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

## Learning Outcomes

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

**ULO1:** Recognise the basic research methods to prepare and commence research

**ULO2:** Apply basic methods to perform research data analysis, data collection, and data storage.

**ULO3:** Demonstrate and compare different communication types used throughout a research network.

## General Assessment Information

Grade descriptors and other information concerning grading are contained in Schedule 1 of the Macquarie University Assessment Policy, which is available at: <https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policies/assessment>.

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

All final grades in the Bachelor of Clinical Science are determined by a grading committee and are not the sole responsibility of the Unit Convenor.

Students will be awarded a final grade plus a Standardised Numerical Grade (SNG). The SNG is not necessarily a summation of the individual assessment components. The final grade and SNG that are awarded reflect the corresponding grade descriptor in the Grading Policy.

To pass this unit, students must demonstrate sufficient evidence of achievement of the learning outcomes, attempt all assessment tasks, meet any ungraded requirements including professionalism and achieve an SNG of 50 or better.

## Student Professionalism

In the Faculty of Medicine, Health and Human Sciences, professionalism is a key capability embedded in all our courses. As part of developing professionalism, students are expected to attend all small group interactive sessions including tutorials, as well as practical sessions.

Students are required to attend a minimum of 80% of all small group interactive sessions. Students that do not meet this requirement may be deemed unable to meet expectations regarding professionalism and may be referred for disciplinary action (which may include exclusion from assessments and unit failure).

Similarly, as part of developing professionalism, students are expected to submit all work by the due date. Applications for assessment task extensions must be supported by appropriate evidence and submitted via [www.ask.mq.edu.au](http://www.ask.mq.edu.au). For further details please refer to the Special Consideration Policy available at <https://students.mq.edu.au/study/my-study-program/special-consideration>.

## Late Submission

Late submissions will receive a 5% per day penalty including weekends and public holidays. If you submit the assessment task 10 days or more beyond the due date you will be awarded a maximum of 50% of the overall assessment marks.

For example:

| Due date    | Received    | Days late | Deduction | Raw mark | Final mark |
|-------------|-------------|-----------|-----------|----------|------------|
| Friday 14th | Monday 17th | 3         | 15%       | 75%      | 60%        |

## Assessment Tasks

| Name   | Weighting | Hurdle | Due          |
|--|-----------|--------|--------------|
| <a href="#">Medical Research Study</a>                   | 50%       | No     | Week 2 and 4 |
| <a href="#">Statistical Data Analysis</a>                | 30%       | No     | Week 3       |
| <a href="#">Assessment of simulated medical research</a> | 20%       | No     | Week 5       |

### Medical Research Study

Assessment Type <sup>1</sup>: Report

Indicative Time on Task <sup>2</sup>: 25 hours

Due: **Week 2 and 4**

Weighting: **50%**

Using a hypothetical research project you will provide a report on the study design and study results and findings.

On successful completion you will be able to:

- Recognise the basic research methods to prepare and commence research
- Apply basic methods to perform research data analysis, data collection, and data storage.
- Demonstrate and compare different communication types used throughout a research network.

### Statistical Data Analysis

Assessment Type <sup>1</sup>: Quantitative analysis task

Indicative Time on Task <sup>2</sup>: 15 hours

Due: **Week 3**

Weighting: **30%**

You will be provided with a data set in which to perform statistical and descriptive analysis.

On successful completion you will be able to:

- Apply basic methods to perform research data analysis, data collection, and data storage.
- Demonstrate and compare different communication types used throughout a research network.

## Assessment of simulated medical research

Assessment Type <sup>1</sup>: Work-integrated task

Indicative Time on Task <sup>2</sup>: 10 hours

Due: **Week 5**

Weighting: **20%**

A structured assessment combining demonstration of practical research skills and a written task based on the practical activities conducted in the simulated medical research experience component of the unit.

On successful completion you will be able to:

- Recognise the basic research methods to prepare and commence research
- Apply basic methods to perform research data analysis, data collection, and data storage.
- Demonstrate and compare different communication types used throughout a research network.

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<sup>1</sup> 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
- the [Learning Skills Unit](#) for academic skills support.

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

## Delivery and Resources

**This unit involves essential on-campus learning activities which will be delivered in accordance with a COVID Safe plan. You are expected to attend on-campus for these activities unless the Public Health Orders and/or University advice changes, you have any symptoms of**

**COVID or you have been identified as a contact of an individual with COVID. Please refer to iLearn for further information.**

## **Weeks 1 to 4 - remote learning**

The first 4 weeks of this unit will be delivered on-line. You will be able to complete this period of the unit off-campus if you wish.

## **Week 5 - compulsory on-campus**

Week 5 comprises an intensive practical-based week. On-campus attendance is compulsory for this week.

## **Technology Used**

Active participation in the learning activities throughout the unit will generally 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.

## **Recommended Readings**

Unit readings are available via the University library website through Leganto.

## **Unit Schedule**

**Week 1:** Study design in medical research

**Week 2:** Statistics in medical research

**Week 3:** Data and scientific presentation

**Week 4:** Medical research network and communication

**Week 5:** Medical research in practice (practical experience)

## **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](#)
- [Grade Appeal Policy](#)

- [Complaint Management 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 [ask.mq.edu.au](http://ask.mq.edu.au) or if you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## Student Support

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

## Learning Skills

Learning Skills ([mq.edu.au/learningskills](http://mq.edu.au/learningskills)) provides academic writing resources and study strategies to help you improve your marks and take control of your study.

- [Getting help with your assignment](#)
- [Workshops](#)
- [StudyWise](#)
- [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 Enquiry Service

For all student enquiries, visit Student Connect at [ask.mq.edu.au](http://ask.mq.edu.au)

If you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## Equity Support

Students with a disability are encouraged to contact the [Disability Service](#) who can provide appropriate help with any issues that arise during their studies.

## IT Help

For help with University computer systems and technology, visit [http://www.mq.edu.au/about\\_us/offices\\_and\\_units/information\\_technology/help/](http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/).

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.

## Changes from Previous Offering

This unit has been significantly redesigned from the 2020 offering. The unit now has a major emphasis on general skills that could be applied to *any form of medical research*, whether it be basic cell or animal research, clinical research, health informatics, or biomedical device development. The redesigned unit will provide a base level of knowledge for any future interaction with medical research and is designed to support anyone who:

- is planning on taking further research intensive units in the Bachelor of Clinical Science course, and/or
- is planning on research being part of their medical career path, and/or
- is wanting to have a fundamental understanding and skills of critical appraisal of medical research to apply research findings to their medical specialty, or
- is looking on embarking on a research intensive career, which may include progression into the Masters of Research and PhD programs.