



# MEDS14002 *Medical Science Research 2*

## Term 2 - 2020

Profile information current as at 29/04/2024 03:03 pm

All details in this unit profile for MEDS14002 have been officially approved by CQU University 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

Medical Science Research 2 will provide you with further training in research as you continue projects begun in Medical Science Research 1. This unit requires you to independently report on the investigation of the research question proposed. The final journal paper will typically contain the data analyses, results, and discussion in addition to a cogent literature review and hypotheses. It is anticipated that some journal papers may be suitable for eventual publication in an appropriate journal with the academic involved named as co-author. In all stages of the project you must adhere to appropriate ethical and professional standards.

### Details

Career Level: *Undergraduate*

Unit Level: *Level 4*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

Prerequisite: MEDS14001 Medical Science Research 1

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 2 - 2020

- 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. **Written Assessment**

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](#).

## Unit Learning Outcomes

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

1. Collect and use data ethically
2. Critically analyse and interpret research data
3. Interpret research data and discuss findings professionally
4. Prepare and present a research report within the required style and format of an appropriate journal in the field of course enrolment.

The purpose of Medical Science Research 1 & 2 is to provide the student with training in developing, conducting, and communicating research across theoretical and applied domains. This requires students to undertake an investigation of a research question in an area of medical science aligned with their course of enrolment and to report the investigation in written scholarly form. The research question investigated may have either theoretical or applied significance but will add to the body of discipline-specific knowledge and meet the performance criteria for the engaged research element of the appropriate professional competency standards.

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
<b>1 - Written Assessment - 30%</b>	•	•	•	•
<b>2 - Written Assessment - 70%</b>	•	•	•	•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4
<b>1 - Communication</b>	•	•	•	•
<b>2 - Problem Solving</b>	•	•	•	•
<b>3 - Critical Thinking</b>	•	•	•	•
<b>4 - Information Literacy</b>	•	•	•	•
<b>5 - Team Work</b>				
<b>6 - Information Technology Competence</b>	•	•	•	•
<b>7 - Cross Cultural Competence</b>	•			
<b>8 - Ethical practice</b>	•		•	•

Graduate Attributes	Learning Outcomes			
	1	2	3	4
<b>9 - Social Innovation</b>				
<b>10 - Aboriginal and Torres Strait Islander Cultures</b>				

## Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
<b>1 - Written Assessment - 30%</b>	•	•	•	•		•	•	•		
<b>2 - Written Assessment - 70%</b>	•	•	•	•		•	•	•		

## Textbooks and Resources

### Textbooks

**There are no required textbooks.**

#### Additional Textbook Information

**None prescribed** - however, you may wish to continue to refer to the text prescribed for the prerequisite T1 2020 unit MEDS14001:

Research Methodology, a Step-by-Step Guide for Beginners, 5th Ed. (2019).

Author: Ranjit Kumar

Sage Publications, London, UK

ISBN: 978-1-4462-6996-1

Binding: Paperback

### IT Resources

**You will need access to the following IT resources:**

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)

## Referencing Style

All submissions for this unit must use the referencing style: [Vancouver](#)  
For further information, see the Assessment Tasks.

## Teaching Contacts

**Wayne Pederick** Unit Coordinator

[w.pederick@cqu.edu.au](mailto:w.pederick@cqu.edu.au)

**Paul Neilsen** Unit Coordinator

[p.neilsen@cqu.edu.au](mailto:p.neilsen@cqu.edu.au)

**Jordon Irwin** Unit Coordinator

[j.irwin@cqu.edu.au](mailto:j.irwin@cqu.edu.au)

## Schedule

### Week 1 - 14 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Project work for the duration of the term.		Tutorial with Unit Coordinator, Tuesday evening, 7.00-8.00pm: Introduction and expectations. Arrange to meet with your Principal Supervisor (in person or via Zoom). Students should be actively engaged in their research project throughout this unit. Research project work (as proposed in MEDS14001 Medical Research Project 1) should be finalised before the end of the term to allow for sufficient time to analyse data and prepare research results for the powerpoint presentation and written report.

### Week 2 - 20 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Project work for the duration of the term.		<b>Progress Report 1 (optional, non-graded)</b> Due: Week 2 Friday (23 Jul 2020) 5:00 pm AEST.

### Week 3 - 27 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Project work for the duration of the term.		Arrange to meet with your Principal Supervisor (in person or via Zoom).

### Week 4 - 03 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Project work for the duration of the term.		Tutorial with Unit Coordinator, Tuesday evening, 8.00-9.00pm: Progress check.

### Week 5 - 10 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Project work for the duration of the term.		Arrange to meet with your Principal Supervisor (in person or via Zoom). <b>Progress Report 2 (optional, non-graded)</b> Due: Week 5 Friday (14 Aug 2010) 5:00 pm AEST.

### Vacation Week - 17 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
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No formal teaching - independent study/supervised research.

Please take the opportunity to review your progress so far.

#### Week 6 - 24 Aug 2020

##### Module/Topic

##### Chapter

##### Events and Submissions/Topic

Project work for the duration of the term.

Arrange to meet with your Principal Supervisor (in person or via Zoom).

#### Week 7 - 31 Aug 2020

##### Module/Topic

##### Chapter

##### Events and Submissions/Topic

Project work for the duration of the term.

Tutorial with Unit Coordinator, Tuesday evening, 9.00-10.00pm: Preparing a conference presentation.

##### **Progress Report 3 (optional, non-graded)**

Due: Week 7 Friday (4 Sep 2020) 4:00 pm AEST.

#### Week 9 - 07 Sep 2020

##### Module/Topic

##### Chapter

##### Events and Submissions/Topic

Time to prepare your powerpoint presentation.

Tutorial with Unit Coordinator, Wednesday evening, 5.00-6.00pm: Preparing a journal manuscript. Arrange to meet with your Principal Supervisor (in person or via Zoom). Submit draft powerpoint presentation to your Principal Supervisor for feedback (optional).

#### Week 8 - 14 Sep 2020

##### Module/Topic

##### Chapter

##### Events and Submissions/Topic

Project work for the duration of the term.

Arrange to meet with your Principal Supervisor (in person or via Zoom).

#### Week 10 - 21 Sep 2020

##### Module/Topic

##### Chapter

##### Events and Submissions/Topic

Time to finish writing up your research report.

Arrange to meet with your Principal Supervisor (in person or via Zoom) to discuss feedback on draft powerpoint presentation.

#### Week 11 - 29 Sep 2020

##### Module/Topic

##### Chapter

##### Events and Submissions/Topic

Time to finalise your research report, incorporating feedback.

Submit draft research report to your Principal Supervisor for feedback (optional).

##### **Assessment 1 - Powerpoint Presentation**

Due: Week 11 Friday (2 Oct 2020) 11:00 pm AEST.

##### **Written Assessment 1 - Powerpoint Presentation**

Due: Week 11 Friday (2 Oct 2020) 11:00 pm AEST

#### Week 12 - 05 Oct 2020

##### Module/Topic

##### Chapter

##### Events and Submissions/Topic

Time to finalise your powerpoint presentation, incorporating feedback.

Arrange to meet with your Principal Supervisor (in person or via Zoom) to discuss feedback on draft research report.

### **Assessment 2 - Research Report, written as a Journal Manuscript**

Due: Week 12 Friday (9 Oct 2020)  
11:00 pm AEST.

## Term Specific Information

The Unit Coordinator is Associate Professor Paul Neilsen and can be contacted at p.neilsen@cqu.edu.au or on 07 4930 9108.

It is important to check your student e-mail regularly as updates about the unit will be sent from the Unit Coordinator by e-mail. E-mail is also the easiest way for you to contact your Principal Research Supervisor.

This unit is a 6-credit point unit which requires you to allocate around 12 hours per week towards it. The unit is graded. There are two graded assessment items, a powerpoint presentation of your research findings, worth 30% (with no minimum passing requirements), and a written research report that is worth 70% (with a minimum passing requirement of 50%). In addition, you may submit each of three progress reports (optional, non-graded), which provide an opportunity to monitor your advancement and to raise any issues that you may have.

Your Principal Research Supervisor, allocated to you at the start of MEDS14001 in term 1, will guide you through the process of developing a research project and will provide formative feedback and support. Regular tutorial times are scheduled for you to meet with your Principal Supervisor to discuss the progress of your research project. You will be able to ask specific questions, gain feedback and discuss how to best complete the assessment tasks

It is intended that there is potential for an academic publication to be produced from your project.

This unit will make regular use of the required text from the prerequisite T1 unit MEDS14001: Research Methodology, a Step-by-Step Guide for Beginners (5th Ed., 2019) by Ranjit Kumar (Sage Publications).

## Assessment Tasks

### 1 Written Assessment 1 - Powerpoint Presentation

#### **Assessment Type**

Written Assessment

#### **Task Description**

You are required to prepare (but not give) a presentation that outlines your project as if it were to be delivered to an informed audience, e.g. your student peers and members of the CL10 and CG93 course staff. The presentation will:

- include a brief background to your project;
- highlight the significance of the study;
- outline the research question(s) to be answered;
- describe the project methodology including ethical considerations and data collection and analytical techniques; and
- describe how the project outcomes will be disseminated.

The presentation should contain up to 12 slides.

Further detailed information on how to complete the task is provided to you under the assessment tab in Moodle.

#### **Assessment Due Date**

Week 11 Friday (2 Oct 2020) 11:00 pm AEST

Week 11 Friday (2 Oct 2020) 11:00 pm AEST

#### **Return Date to Students**

Review/Exam Week Monday (12 Oct 2020)

#### **Weighting**

30%

## Assessment Criteria

The assessment criteria include:

- Clarity and accuracy of presentation of research information (including topic, background, aims, findings) discussion, conclusion and future directions for the research;
- Clarity and quality of presentation structure;
- Structure, grammar and submission requirements.

A marking rubric is available to students on the unit Moodle site. This includes criteria to help identify your weaknesses and strengths. Specific feedback and suggestions to improve performance will also be provided.

## Referencing Style

- [Vancouver](#)

## Submission

Online

## Submission Instructions

Online submission via the unit Moodle site. Please submit as a powerpoint file .ppt or .pptx

## Learning Outcomes Assessed

- Collect and use data ethically
- Critically analyse and interpret research data
- Interpret research data and discuss findings professionally
- Prepare and present a research report within the required style and format of an appropriate journal in the field of course enrolment.

## Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

# 2 Written Assessment 2 - Research Report, written as a Journal Manuscript

## Assessment Type

Written Assessment

## Task Description

Dissemination of knowledge and research discoveries to the scientific communities are essential for global improvements to our technologies and currently accepted practices or standards of care. Researchers must be proficient in conveying their research findings through written submissions to journals or other forms of scientific communication. A scientific manuscript is a formal report of the research and findings. This assessment will provide you with the opportunity to prepare a written manuscript based on the project you have proposed and conducted and its findings. Your manuscript should be between 2,500 – 3,000 words and should include the following section:

1. Abstract: summary of the research and its findings in a coherent and logical, yet concise way (limit 250 words);
2. Introduction: definition of the topic and discussion on what is known (literature review), the gaps in knowledge and the significance of the study, and the aim and research questions;
3. Method: description of the materials, methods and analyses used to answer research questions;
4. Results: presentation of the findings of the research in a clear and concise way in text, tables and figures;
5. Discussion: interpretations of the findings and how they compare with literature, what they add and what are the limitations;
6. Conclusion: summary of the findings, and meaningful and supported suggestions for the application of the findings;
7. References to the literature used and cited in the manuscript.

Template, assessment guide and additional materials to support your development of the Manuscript will be provided on the unit Moodle page. Further detailed information on how to complete this task is provided to you throughout this unit and under the assessment tab in the unit Moodle site. Your Principal Supervisor will be able to provide discipline-specific advice.

If your research proposal is considered high risk, before you undertake your research you will need to complete a Human Research Ethics Application (HREA) <https://hrea.gov.au/> which then goes before a full Human Research Ethics Committee



(HREC). This process will take considerably longer to gain ethics approval. The information that you compile for the low risk research proposal assignment will be able to be used in the HREA high risk application but this will require further details. It is suggested that you speak to your discipline-specific Principal Supervisor if you need to go down this path to complete your research.

### **Assessment Due Date**

Week 12 Friday (9 Oct 2020) 11:00 pm AEST

### **Return Date to Students**

Exam Week Monday (19 Oct 2020)

### **Weighting**

70%

### **Minimum mark or grade**

50%

### **Assessment Criteria**

Your manuscript will be assessed using a detailed marking rubric available on the Moodle page. The marking criteria include:

- Clarity and accuracy of the title, abstract, introduction and background;
- Accuracy of the methods/statistical analysis and ethics consideration (if applicable) outlined;
- Clarity of results and findings and accuracy of reporting;
- Logic and accuracy of discussion and limitations;
- Clarity of conclusion and the implication of findings;
- Referencing, structure, grammar and submission requirements.
- Adherence to word limit.

This includes criteria to help identify your weaknesses and strengths. Specific feedback will be provided by your Principal Supervisor. General feedback and suggestions to improve performance will also be provided. If you require additional feedback for this task, you should contact the Unit Coordinator.

### **Referencing Style**

- [Vancouver](#)

### **Submission**

Online

### **Submission Instructions**

Online submission via the unit Moodle site. Please submit as a word document .doc or .docx

### **Learning Outcomes Assessed**

- Collect and use data ethically
- Critically analyse and interpret research data
- Interpret research data and discuss findings professionally
- Prepare and present a research report within the required style and format of an appropriate journal in the field of course enrolment.

### **Graduate Attributes**

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

## 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