



MEDS21006 Medical Science Research Project 2

Term 1 - 2019

Profile information current as at 20/05/2024 06:21 am

All details in this unit profile for MEDS21006 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

The purpose of the Medical Science Research Project 2 unit is to provide you with further training in research as you continue projects begun in Medical Science Research Project 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: *Postgraduate*

Unit Level: *Level 8*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Prerequisite - MEDS21003 Medical Science Research Project 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 1 - 2019

- 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 Postgraduate 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](#).

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 Through Moodle site

Feedback

Students found the timing of assessment feedback to be an issue

Recommendation

Investigate the potential to increase tutor numbers to help with marking and thereby reduce turnaround time

Feedback from Through Moodle site

Feedback

Students found assessment feedback constructive and helped them improve their assignments

Recommendation

Continue this and reassess in 12 months

Feedback from Through Moodle site and Zoom tutorials

Feedback

Students found the scheduling of Zoom sessions to be inconvenient and potentially contributed to their poor attendance

Recommendation

Offer students an opportunity to select a number possible Zoom tutorial sessions during the week to attend

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 journal paper within the required style and format of an appropriate journal in the field of course enrolment.

The purpose of Medical Science Research Project's 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 to be 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

 N/A Level	 Introductory Level	 Intermediate Level	 Graduate Level	 Professional Level	 Advanced Level
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Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
1 - Written Assessment - 30%	•	•	•	•
2 - Written Assessment - 70%	•	•	•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4
1 - Knowledge	○	○	○	○
2 - Communication	○	○	○	○
3 - Cognitive, technical and creative skills		○	○	○
4 - Research	○	○	○	○
5 - Self-management	○	○	○	○
6 - Ethical and Professional Responsibility	○			
7 - Leadership				○
8 - 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
1 - Written Assessment - 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)
- Microphone (and preferably a camera) for participation in zoom tutorials

Referencing Style

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

Teaching Contacts

Andrew Vitiello Unit Coordinator
a.vitiello@cqu.edu.au

Schedule

Week 1 - Welcome and introduction - 11 Mar 2019

Module/Topic	Chapter	Events and Submissions/Topic
Welcome to the unit. Introduction. Introduction to your tutor. Critical Appraisal Tools (CATs), Patient/Population/Problem, Intervention, Comparison, Outcome (PICOs), Risk of Bias (RoBs)	CRO copy of Chapter 1 and 2 of "Research methodology, a step-by- step guide for beginners" (Ranjit Kumar) will be available for you on Moodle. Online lectures and reading materials.	Zoom tutorial - Welcome, introduction to Moodle, unit and assessment items. Date and Time to be confirmed Familiarise yourself with the assessment task in Moodle and think about a topic choice.

Week 2 - The research topic - 18 Mar 2019

Module/Topic	Chapter	Events and Submissions/Topic
How to post and phrase a research question? An exercise in PICOs How to do a literature search and locate studies: The keywords, databases	Online lectures and reading materials.	Zoom tutorial - a good research topic, keywords. Date and Time to be confirmed Start a literature review to determine if the topic of the paper is suitable. Contact unit coordinator by 5 pm on Friday of week 2 about your topic and keywords.

Week 3 - Literature search - 25 Mar 2019

Module/Topic	Chapter	Events and Submissions/Topic
Critical Appraisal Tools (CATs) of studies Searching the literature Literature search to determine if there is enough literature to allow progress on your topic, considering the feedback.	Online lectures and reading materials.	Zoom tutorial- Date and Time to be confirmed

Week 4 - Annotated Bibliography - 01 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
What is a literature review and how to do it? Understanding RoBs Understanding annotated bibliography. Data collection	Online lectures and reading materials.	Zoom tutorial - Annotated bibliography - Date and Time to be confirmed Refine your research topic from feedback.

Week 5 - Annotated Bibliography - 08 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
More on annotated bibliography. Applying CATs and RoBs to the annotated bibliography. Academic referencing.	Online lectures and reading materials.	Zoom tutorial- Date and Time to be confirmed

Vacation Week - 15 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
Enjoy the brief vacation week - but keep working on your bibliography.		

Week 6 - Narrative review - 22 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
How to write an annotated bibliography and consolidating the findings. Understanding narrative review	Online lectures and reading materials.	Zoom tutorial - How to write the introduction. Date and Time to be confirmed Assessment 1- Annotated bibliography and summary Due: Week 6 Monday (22 Apr 2019) 5:00 pm AEST

Week 7 - PRISMA - 29 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Data analyses Narrative Vs Systematic review	Online lectures and reading materials.	Write up the introduction Zoom tutorial- Date and Time to be confirmed

Week 8 - The Body of the paper - 06 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
CATs for Narrative review Interpretation of findings	Online lectures and reading materials.	Zoom tutorial - How to write discussion Date and Time to be confirmed You should have the first draft of your introduction and discussion outlined by now and can start the write-up - whilst still searching for literature. You may need to develop tables/images. Contact your assigned tutor or unit coordinator again to ensure you are progressing well.

Week 9 - discussion - 13 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
How to discuss your findings and make sense of it all. Basic statistics Writing an abstract and conclusion	Online lectures and reading materials.	Zoom tutorial- Date and Time to be confirmed You have almost 3 weeks until submission - you need to consider writing your first draft to allow time for editing.

Week 10 - abstract and conclusion - 20 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
Refining and updating the review. Bringing all of it together	Online lectures and reading materials.	Zoom tutorial - Revising the paper - Date and Time to be confirmed

Week 11 - bringing it all together - 27 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
Feedback on final draft and correction/editing of the paper.	Online lectures and reading materials.	Zoom tutorial - Date and Time to be confirmed

Week 12 - final touches - 03 Jun 2019

Module/Topic	Chapter	Events and Submissions/Topic
Feedback and correction/editing of the paper.	Online lectures and reading materials.	Zoom tutorial - Final touches and preparing to submit - Date and Time to be confirmed Assessment 2- Final Paper Due: Week 12 Friday (7 June 2019) 5:00 pm AEST

Review/Exam Week - 10 Jun 2019

Module/Topic	Chapter	Events and Submissions/Topic
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Exam Week - 17 Jun 2019

Module/Topic	Chapter	Events and Submissions/Topic
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Assessment Tasks

1 Assessment 1- Annotated bibliography and summary

Assessment Type

Written Assessment

Task Description

Health professions value their body of knowledge. Members of each profession are expected to contribute to advancing this body of knowledge through their research. When shared with the profession at conference presentations and publications such research findings can have a significant impact on safety, patient care, education and related fields. In this assessment, you will develop and apply skills to enable you to write a research paper in 'final draft' version, or thereabouts. The skills you will develop include the ability to critically analyse reading material, to articulate an academic argument and to reflect on your own bias and assumptions. You will use these skills throughout your career as a health professional. In the health professions, the body of knowledge is constantly expanding as improvements in technology and further discoveries take place. You will be at the forefront of this advance. You will read about the changes in your profession and its practice and work to advance your field yourself. This unit will provide you with the knowledge and skills to read, evaluate and undertake research projects.

In this assessment item, you will be required to submit an annotated bibliography and a summary with a word limit of 2000 +/- 10% (1800 - 2200 words).

The assessment submission should have:

- A **title**: This can be an interim title and pertinent to what is discussed in the paper.
- At least 4 **keywords**: These are used for the literature search.
- A valid **clinical question**: This is the question you answer through this paper.
- A described **method** to your literature search: databases searched for inclusion and exclusion criteria, boolean/mesh search terms.
- At least 5 **references** collected through the literature search. Remember to include high quality, high impact, and high citation references.
- A brief **critique** of the references (annotated bibliography). Try to keep the description below 200 words for each reference. The main theme of the paper and how it relates to your research question should be explained.
- A **summary** of the literature findings: This summarises the 5 references and consolidates the findings.

Communication with the unit coordinator is required throughout the term to ensure you are progressing in the right direction.

Assessment Due Date

Week 6 Monday (22 Apr 2019) 5:00 pm AEST

Submission via Moodle site

Return Date to Students

Week 8 Monday (6 May 2019)

Feedback will be provided on, or attached to, the assessment.

Weighting

30%

Minimum mark or grade

50%

Assessment Criteria

Assessment criteria for MEDS21006 Medical Science Research project 2 (detailed marking rubric is available on the Moodle site)

Title:

- Does the title reflect the theme of the paper and choice of the title?
- Spelling and grammar.
- Appropriateness of language.

Keywords:

- Minimum of 4 keywords included.
- Choice of keywords - are they unique?
- Are the keywords relevant to the paper?
- Will the literature searches find what the keywords describe?

References:

- Are in Vancouver style.
- Must be relevant and reliable.
- Citation index (quality of references) of the reference source journal has been considered.
- Have you indicated the relative prominence of this researcher and the references within your field of research?

Critique of the references:

- Demonstrates a wide range of reading which is relevant to the research question.
- Written with academic rigor and gives a clear and concise description of the main theme of the paper with relevant information extracted.
- Contains concise summarization of important findings, central theme, and scope.
- Summarises the limitations of paper.
- Describes how it is useful for your research.
- Contextualises the problem – relates literature to problem or issue.
- Demonstrates an ability to search, assess and manage literature information and demonstrate critical thinking and position research within the conceptual framework of the discipline with sufficient amount and quality of data or information that is well presented systematically, intelligently interpreted and relevant.

Clinical Question:

- A Valid research question, described in a precise and unambiguous way that is relevant to literature and reflects the purpose of the paper.
- Describes the context in which the question arises

Summary of the references:

- Describes the motivation for the study
- Summarises the findings of the 5 references used
- Discusses the importance of the findings
- Demonstrates originality and creativity of topic and contribution to the field
- The analysis is described appropriately, aligns with the question and hypothesis raised, shows sophistication, is iterative and relates to literature
- Author cogently expresses insights gained from the study and study limitations
- Critically analyses in an objective and coherent manner

Written style, presentation, and communication:

- Synthesises information into a unified and coherent whole – internal consistency and logical flow – there is a clear progression from research question through to conclusion
- Written in a style that is culturally and ethically aware.
- Written in scholarship style and presentation.
- Independently written and can foster intellectual debate.
- Demonstrates creativity and originality

Referencing Style

- [Vancouver](#)

Submission

Online

Submission Instructions

Submission via Moodle site

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 journal paper within the required style and format of an appropriate journal in the field of course enrolment.

Graduate Attributes

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research
- Self-management
- Ethical and Professional Responsibility
- Leadership

2 Assessment 2- Final Paper

Assessment Type

Written Assessment

Task Description

Health professions value their body of knowledge. Members of each profession are expected to contribute to advancing this body of knowledge through their research. When shared with the profession at conference presentations and publications such research findings can have a significant impact on safety, patient care, education and related fields. In this assessment, you will develop and apply skills to enable you to write a research paper in 'final draft' version, or thereabouts. The skills you will develop include the ability to critically analyse reading material, to articulate an academic argument and to reflect on your own bias and assumptions. You will use these skills throughout your career as a health professional.

This written assessment is intended to provide you with an opportunity to write a draft research paper in final, or close to final, draft stage.

If you have undertaken data collection as part of your research paper then you can continue to develop that line of research and write a paper on that topic.

If you have not undertaken any data collection before then you can write a structured narrative literature review paper on the same topic initially researched in MEDS21003 or a new or modified topic. The topic of the paper should be suitable for your discipline. The paper should be **4000 +/- 10% (3600 to 4400) words** long with the word count excluding the unstructured abstract and references. At least 20 journal articles will need to be cited throughout the paper.

In this assessment item, you will be required to submit the final draft of the completed paper. Feedback will be provided throughout the term and after submission and grading, which may be used to further edit the paper for submission to an appropriate journal for publication.

Communication with the assigned tutor and unit coordinator is required throughout the term to ensure you are progressing in the right direction.

Assessment Due Date

Week 12 Friday (7 June 2019) 5:00 pm AEST

Submission via Moodle site

Return Date to Students

Feedback will be provided on, or attached to, the assessment and be available TWO WEEKS after the Friday of week 12

Weighting

70%

Minimum mark or grade

50%

Assessment Criteria

Assessment criteria for the narrative review - detailed marking rubric is available on the Moodle site.

Unstructured Abstract

- The abstract is written as a short, robust, stand-alone summary of the work or paper that summarises the findings adequately.
- Includes the main theme from introduction and conclusions.
- Identifies major results.
- Is written to appropriate length (recommended 200 words)

Introduction

- Includes problem statement
- Makes clear the research question to be addressed
- Describes the motivation for the study
- Describes the context in which the question arises
- Summarises the findings
- Discusses the importance of the findings
- Provides a roadmap for readers
- Demonstrates originality and creativity of topic and contribution to the field

The body of the paper (results and discussion)

- Is written comprehensively and shows a good command of the literature
- Demonstrates a wide range of reading which is relevant to the research question
- Contextualises the problem - relates literature to problem or issue
- Includes a discussion of the literature that is selective, synthetic, analytical and thematic
- Demonstrates an ability to search, assess and manage literature information and demonstrate critical thinking and position research within the conceptual framework of the discipline
- The methodology is well explained, unambiguous, logical and practical.
- Results are well presented either as narrative or tabulated.
- The analysis is appropriately discussed, aligns with the question and hypothesis raised, shows sophistication, is iterative and relates to literature, with sufficient amount and quality of data or information, well presented systematically, intelligently interpreted and relevant
- Author cogently expresses insights gained from the study and study limitations

Conclusion

- Written in a way that draws conclusions from the study and relates to major points arising from research while it summarises the findings, provides perspective on them, refers back to the introduction, ties everything together, discusses the study's strengths and weaknesses, discusses the implication and how the study enhances the knowledge in the profession and makes recommendations for applications for the discipline and discusses future directions for research
- The critical analysis presented is insightful and well supported and demonstrates sound critical judgment in all aspects
- It contains a statement of validity - significance is strongly justified

Written style, presentation, and communication

- Synthesises information into a unified and coherent whole - internal consistency and logical flow - there is a clear progression from research question through to conclusion
- Written in a style that is culturally and ethically aware

- Critically analyses own work in an objective and reflective manner
- Data and findings are presented astutely, creatively and effectively
- Uses visual presentation to maximum effect – best presentation approach for purpose and audience
- Written in scholarship style and presentation
- Findings are communicated in a style that incorporates specialist and non-specialist audiences and are very clearly articulated but demonstrate critical judgment
- Independently written and can foster intellectual debate
- Contributes information that is relevant and of value to the field concerned
- Demonstrates creativity and originality
- Appropriate in-text referencing
- Accurate and complete reference list
- Appropriate language, clear, accurate and used to maximum effect
- Outstanding command of grammar and spelling and editing is thorough

Contribution to the field

- Relative to the limited time available for a research project – meticulous, substantial exploration of limits and strengths
- Contribution of a novel or new knowledge to the development of current theory, research or practice

Assessment criteria for research paper:

The assessment criteria are the same as for the narrative review, with the addition of:

Materials and Methods:

- The description of data collection methodology is detailed and flawless.
- The steps in data collection are defined in appropriate details that will make the reader follow to attain similar results.
- The population/sampling, location, restriction/limiting conditions, sampling techniques, procedures, materials, and variables are discussed unambiguously.
- Any lab equipment, specific instruments, subjects, computer or mathematical models are explained.
- Any bias in data collection is clearly explained.

Results:

- Results are described in an orderly fashion using text and illustrative methods.
- Summaries of statistical analyses are described.
- Tables and figures appropriately used in support of the text.
- Negative results are also reported.

Referencing Style

- [Vancouver](#)

Submission

Online

Submission Instructions

Submission via Moodle site

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 journal paper within the required style and format of an appropriate journal in the field of course enrolment.

Graduate Attributes

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research
- Self-management
- Ethical and Professional Responsibility
- Leadership

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