



MEDS21006 Medical Science Research Project 2

Term 2 - 2020

Profile information current as at 06/05/2024 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 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 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 Have Your Say survey

Feedback

Students found the Moodle site difficult to navigate compared to other pages

Recommendation

The Unit Coordinators will meet and discuss a way to improve the optics of the unit so that it may be less frustrating for students to navigate and appeal to the different disciplines that use this Moodle page

Feedback from Have Your Say survey

Feedback

Students appreciated the Unit Co-ordinators dedication to the unit and the access they had to him in having questions answered

Recommendation

The Unit Coordinator will continue to provide structure to the Zoom tutorials by ensuring unit milestones are highlighted and encouraging students to meet them throughout the course of the term. He will also make sure students have easy access to him so that questions and issues can be addressed in a quick and efficient timeframe

Feedback from Have Your Say survey

Feedback

Students appreciated how they were guided through the assessment writing process and as a result were able to enjoy the unit much more than was initially anticipated

Recommendation

The Unit Coordinator will continue to provide small, yet achievable goals, throughout the term that are directly related to the composition and drafting of the final assignment

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

MEDS21006

Prescribed

Research Methodology, a step-by-step guide for beginners

Edition: 5th (2019)

Authors: Ranjit Kumar

Sage Publications Ltd

London , UK

ISBN: 1526449900

Binding: Paperback

MEDS21006

Supplementary

Introduction to research in the health sciences

Edition: 6th (2013)

Authors: Stephen Polgar, Shane A. Thomas.

Elsevier

Sydney , NSW , Australia

ISBN: 97800702041945

Binding: Paperback

Additional Textbook Information

If you prefer to study with a paper copy, they are available at the CQUni Bookshop here: <http://bookshop.cqu.edu.au> (search on the Unit code). eBooks are available at the publisher's website.

[View textbooks at the CQUniversity Bookshop](#)

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

Ann Quinton Unit Coordinator

a.quinton@cqu.edu.au

Schedule

Week 1 The Goal of the Literature Review - 13 Jul 2020

Module/Topic

Chapter

Events and Submissions/Topic

- Selecting a topic
- Patient/Population/Problem, Intervention, Comparison, Outcome (PICO)
- Clarifying the purpose of your literature review

Zoom tutorial Wednesday night 7-8pm AEST
Familiarise yourself with the assessment task in Moodle and think about a topic choice.

Week 2 The research topic - 20 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> • Choosing databases • Developing a search strategy: key terms and concepts • Critical appraisal tools (CATs) • Risk of Bias (RoBs) 		Start a literature review to determine and if the topic of the paper is suitable if there is enough literature to allow progression on your topic.

Week 3 The Annotated Bibliography - 27 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Writing an annotated bibliography <ul style="list-style-type: none"> • Summary • Evaluation • Reflection 		Zoom tutorial Wednesday 7-8pm AEST

Week 4 The Annotated Bibliography - 03 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Writing a critical review from the annotated bibliography		Refine your research topic from feedback.

Week 5 Data Presentation - 10 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Presentation of data <ul style="list-style-type: none"> • Method • Method for narrative review: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) • Statistics • Figures • Tables 		Zoom tutorial Wednesday 7-8pm AEST Assessment 1- Annotated bibliography and summary Due: Week 5 Friday (14 Aug 2020) 4:00 pm AEST

Vacation Week - 17 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Break week		

Week 6 Narrative review or research paper - 24 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
Analysing the literature <ul style="list-style-type: none"> • Selection of information • Argument • Structure • Process 		

Week 7 Introduction - 31 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> • Introducing the topic • Outlining importance of topic • Finding the gaps in the literature • Aim 		Zoom tutorial Wednesday 7-8pm AEST Write up the introduction

Week 8 The Body of the paper - 07 Sep 2020

Module/Topic	Chapter	Events and Submissions/Topic
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- Discussing your findings
- Introducing themes
 - Critique of literature
 - Areas for further research
 - Limitations
 - Concluding statements

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 to ensure you are progressing well.

Week 9 Conclusion - 14 Sep 2020

Module/Topic	Chapter	Events and Submissions/Topic
Writing a conclusion <ul style="list-style-type: none"> • Statement of findings • Areas for future research 		Zoom tutorial Wednesday 7-8pm AEST Consider writing your first draft to allow time for editing.

Week 10 Abstract - 21 Sep 2020

Module/Topic	Chapter	Events and Submissions/Topic
How to write a concise summary of your work		

Week 11 Bringing it all together - 28 Sep 2020

Module/Topic	Chapter	Events and Submissions/Topic
Feedback on final draft and correction/editing of the paper.		Zoom tutorial Wednesday 7-8pm AEST

Week 12 Final touches - 05 Oct 2020

Module/Topic	Chapter	Events and Submissions/Topic
Final editing of paper		Assessment 2 - Final Paper Due: Week 12 Friday (9 Oct 2020) 4:00 pm AEST

Review/Exam Week - 12 Oct 2020

Module/Topic	Chapter	Events and Submissions/Topic
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Exam Week - 19 Oct 2020

Module/Topic	Chapter	Events and Submissions/Topic
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Term Specific Information

The unit coordinator is Dr Ann Quinton (Sydney). The best way to contact Ann is via email at:

a.quinton@cqu.edu.au

It is important to check your student email regularly as updates about the unit will be sent from the unit coordinator by email. Please ensure email correspondence is done via your CQU student email.

Ann's phone number is 02 9324 5008 however she is often in the sonography labs so an email is the best way to organise a time to speak.

This unit is a 6 credit point unit which requires you to allocate around 12 hours per week for study. The unit is graded.

Assessment Tasks

1 Assessment 1- Annotated bibliography and summary

Assessment Type

Written Assessment

Task Description

This assessment item requires you to submit annotated bibliographies on five (5) scientific journal articles along with a research question, method that describes how you searched for the articles and an overall summary of the information that has been presented in the annotated bibliographies. The word limit is 2000 +/- 10% (1800 - 2200) words. An

annotated bibliography is a concise evaluation (annotation) of each of the five articles that follows the bibliographic (reference) information. The purpose of an annotated bibliography is to collect information and organise your sources for further research. Each bibliographic annotation will be 200-250 words and will:

- Provide the bibliographic citation (reference) using Vancouver referencing style
- State the background of the author(s) and reliability of the article
- State who the intended audience was
- Introduce the content of the article (aim and methods)
- Outline the main scope or argument of the article along with identifying the conclusion/s made by the author
- Report any unique or special features of the article that are helpful, for example tables, figures, charts or graphs
- Discuss the relevance or usefulness of the article for your research
- State the strengths and limitations of the article
- Present your reflection or reaction to the article.

The annotated bibliography and summary should have:

- A **title**: This will be pertinent to what is discussed in the assessment
- At least four (4) **keywords**: These are used for your literature search
- A valid **clinical question**: This is the question you answer in this assessment
- A described **method** to your literature search: databases searched for inclusion and exclusion criteria, Boolean/MeSH search terms
- At least five (5) **references** collected through the literature search. Remember to include high quality, high impact, and high citation references
- The **annotated bibliography**
- A **summary** of the literature findings. You will summarise the five (5) references and consolidate the findings. More references can be included in the summary if it helps explain and answer your question although this is not compulsory. Additional references will need to be referenced at the end of the document.

Communication with the unit coordinator and your assigned tutors is required throughout the term to ensure you are progressing in the right direction. As with all university assessments, colluding with other students on non-group work tasks is considered academic misconduct and will be dealt with in adherence with the CQU student academic integrity policy and procedure.

Assessment Due Date

Week 5 Friday (14 Aug 2020) 4:00 pm AEST

Submission via Moodle site

Return Date to Students

Week 6 Friday (28 Aug 2020)

Return will be at or after 28/08/2020 due to moderation of multiple markers

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:

- Reflects the theme of the paper
- Correct spelling and grammar
- Appropriate language

Keywords:

- Minimum of 4 unique and relevant keywords
- The literature searches finds what the keywords describe

References:

- Are in Vancouver style
- Relevant and reliable
- Citation index (quality of references) of the reference source journal has been considered

Annotated bibliography:

- Demonstrates a wide range of reading which is relevant to the research question
- Written with academic rigour and gives a clear and concise description of the main theme of the paper
- Contains concise summarisation of important findings, central theme and scope
- Summarises the strengths and 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. Demonstrates critical thinking and positions the 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 the 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 raised, shows sophistication, is iterative and relates to the 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 demonstrating internal consistency and logical flow. There is a clear progression from research question through to conclusion
- Written in a scholarly style that is culturally and ethically aware
- Written to 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

In this assessment, you will develop and apply skills to enable you to write a research paper. This assessment scaffolds from assessment 1 in MEDS21006. The research paper should be suitable for your discipline and will either be:

1. The write up of the research project you commenced in MEDS21003, subsequently received ethics approval to do, and have collected data for, or
2. A narrative review on a topic related to the one you commenced in MEDS21003 or a new topic.

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.

The research paper should be **2500 +/- 10% (2250 to 2750) words** long with the word count excluding the unstructured abstract, figures, tables, and references. At least 20 journal articles will need to be cited throughout the paper.

Communication with the assigned tutor and unit coordinator is required throughout the term to ensure you are progressing in the right direction. As with all university assessments, colluding with other students on non-group work tasks is considered academic misconduct and will be dealt with in adherence with the CQU student academic integrity policy and procedure.

Assessment Due Date

Week 12 Friday (9 Oct 2020) 4:00 pm AEST

Submission via Moodle site

Return Date to Students

Exam Week Friday (23 Oct 2020)

Return will be at or after 23/10/2020 due to moderation of multiple markers

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 adequately summarises the findings
- Includes the main theme from introduction and conclusions
- Identifies major results
- Is written to appropriate length (200 words).

Introduction

- Leads the reader from a general area of research to a specific area of research
- Describes the motivation for the study
- Describes the context in which the question arises
- Discusses the importance of the findings
- Includes problem statement
- Makes clear the research question to be addressed
- Demonstrates originality and creativity of topic and contribution to the field.

The body of the paper (method, results and discussion)

- The methodology is well explained, unambiguous, logical and practical, or presented as a figure which is referred to in the text
- Results are well presented either as narrative and/or tabulated
- Discussion is written comprehensively and critiques 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. Demonstrates critical thinking and positions research within the conceptual framework of the discipline
- The analysis is appropriately discussed, aligns with the question and hypothesis raised, shows sophistication, is iterative and relates to the 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, suggests ideas for further research and discusses

study limitations.

Conclusion

- Written in a way that draws conclusions from the study and relates to major points arising from research
- Summarises and provides perspective on the findings, refers back to the introduction and ties the whole paper together. States the study's strengths and weaknesses, discusses the implication and how the study enhances the knowledge in the profession. 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 of the research
- Contains a statement of validity – significance is strongly justified

Written style, presentation, and communication

- Synthesises information into a unified and coherent whole, demonstrates 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 using the best presentation approach for purpose and audience
- Written and presented in a scholarly style
- 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 with thorough editing

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 detail allowing the reader to be able to reproduce the study
- 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