BMSC13013 *Research Project*

Term 2 - 2021

Profile information current as at 12/10/2024 03:57 pm

All details in this unit profile for BMSC13013 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

This unit provides opportunity for students to complete discipline specific research activities during the 3rd year of their course of study. This involves application of scientific research methodologies to a research problem.

Details

Career Level: *Undergraduate*
Unit Level: *Level 3*
Credit Points: *6*
Student Contribution Band: *8*
Fraction of Full-Time Student Load: *0.125*

Pre-requisites or Co-requisites

Pre-requisite: BMSC12010 Clinical Biochemistry or BIOL12105 Scientific Analysis and Statistics
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 - 2021

- 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: 20%
2. **Presentation**
Weighting: 30%
3. **Written Assessment**
Weighting: 50%

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 Unit coordinator self reflection.

Feedback

An increased diversity of research projects could provide a more engaging experience for students.

Recommendation

Continue ongoing consultation with experienced research staff to explore availability of a wider range of research projects.

Feedback from Students formal evaluation.

Feedback

Step-by-step and scaffolded learning materials and assessments from developing research proposal to manuscript were very helpful.

Recommendation

Continue to provide scaffolded learning materials, tutorials and assessments.

Unit Learning Outcomes

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

1. Develop and deliver a concise research proposal
2. Apply scientific research methodologies to complete a research project
3. Present research findings via written and oral presentations.

Alignment of Learning Outcomes, Assessment and Graduate Attributes

— N/A Level | • Introductory Level | • Intermediate Level | • Graduate Level | ◦ Professional Level | ◦ Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes		
	1	2	3
1 - Written Assessment - 20%	•		
2 - Presentation - 30%	•	•	•
3 - Written Assessment - 50%	•	•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes		
	1	2	3
1 - Communication	•		•

Graduate Attributes	Learning Outcomes		
	1	2	3
2 - Problem Solving	•	•	
3 - Critical Thinking	•	•	•
4 - Information Literacy	•	•	•
5 - Team Work			
6 - Information Technology Competence			•
7 - Cross Cultural Competence			•
8 - Ethical practice	•	•	•
9 - Social Innovation			
10 - 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	9	10
1 - Written Assessment - 20%	•	•	•	•				•		
2 - Presentation - 30%	•	•	•	•		•	•	•		
3 - Written Assessment - 50%	•	•	•	•		•	•	•		

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)

Referencing Style

All submissions for this unit must use the referencing styles below:

- Harvard (author-date)
- American Psychological Association 7th Edition (APA 7th edition)

For further information, see the Assessment Tasks.

Teaching Contacts

Saman Khalesi Unit Coordinator
s.khalesi@cqu.edu.au

Schedule

Week 1 - 12 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Orientation and Introduction to Research Project	Lecture(s), lecture notes and additional reading will be provided on the unit Moodle page	• Zoom tutorial on orientation to the unit and assessments. • Identify your research project (refer to Assessment Information section for more information).

Week 2 - 19 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Research Aim and Literature Review	Lecture(s), lecture notes and additional reading will be provided on the unit Moodle page	• Zoom tutorial on the content from week 2 and proposal development.

Week 3 - 26 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Research Methodology 1 (Design and Data Collection)	Lecture(s), lecture notes and additional reading will be provided on the unit Moodle page	• Zoom tutorial on the content from week 3 and proposal development. • **Part 1 of Research Proposal** (Assessment 1, Part 1) due: Week 3 Friday (30 July 2021) 5:00 pm AEST.

Week 4 - 02 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Research Methodology 2 (Data Management and Analysis)	Lecture(s), lecture notes and additional reading will be provided on the unit Moodle page	• Zoom tutorial on the content from week 4 and proposal development.

Week 5 - 09 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Developing Project Proposal	Notes and additional reading will be provided on the unit Moodle page	• **Part 2 of your Research Proposal** (Assessment 1, Part 2) due: Week 5 Friday (13 Aug 2021) 5:00 pm AEST.

Vacation Week - 16 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
No lecture this week.		

Week 6 - 23 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Presenting Research	Notes and additional reading will be provided on the unit Moodle page	• Zoom tutorial (problem solving).

Week 7 - 30 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Designating and Reporting Research findings	Notes and additional reading will be provided on the unit Moodle page	• **Oral Presentation** (Assessment 2, Part 1) due: Week 7 Friday (3 Sep 2021) 5:00 pm AEST.

Week 8 - 06 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
Developing Manuscript	Notes and additional reading will be provided on the unit Moodle page	• Zoom tutorial (problem solving).

Week 9 - 13 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
No lecture this week.		• **Self and peer assessment** (Assessment 2, part 2) due: Week 9 Friday (17 Sep 2021) 5:00 pm AEST.

Week 10 - 20 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
No lecture this week.		

Week 11 - 27 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
No lecture this week.		• Zoom tutorial (problem solving).

Week 12 - 04 Oct 2021

Module/Topic	Chapter	Events and Submissions/Topic
No lecture this week.		• Manuscript (Assessment 3) due: Week 12 Friday (8 Oct 2021) 5:00 pm AEST. **Manuscript** Due: Week 12 Friday (8 Oct 2021) 5:00 pm AEST

Review/Exam Week - 11 Oct 2021

Module/Topic	Chapter	Events and Submissions/Topic

Exam Week - 18 Oct 2021

Module/Topic	Chapter	Events and Submissions/Topic

Term Specific Information

This unit coordinator is Dr Saman Khalesi. The best way to contact him is via email at: s.khalesi@cqu.edu.au
His office is located on Level 8, Room 8.12, CQU, Brisbane City campus and his phone number is 07 30234153. If you have any questions regarding your assessment tasks or unit related questions which are not of a personal nature please post your question in the Q & A forum on the unit Moodle page. Otherwise, please email him (or call, but email is preferred since he is often in meetings, classes or in the lab) if you need to discuss any queries which are of a professional nature. This unit is a 6 credit point unit. You are expected to spend around 12 hours of time each week towards it. This unit has three assessments including a proposal (worth 20%) an oral presentation (worth 30%) and a written report in the form of a manuscript (worth 50%). This unit is graded and you are expected to obtain at least 50% of each assessment to pass the unit. Lecture(s), reading materials, guidelines and templates will be provided on the Moodle page. Tutorials will also be offered as online Zoom sessions in some weeks (please see the weekly scheduled). These tutorials are to help you with your assessments. They will be recorded for those unable to attend live.

Assessment Tasks

1 Project Proposal

Assessment Type
Written Assessment

Task Description
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, you are required to identify a research project, read and critically evaluate the available literature and develop a project proposal that uses scientific research methodologies to answer specific research questions.

The suitable research project may include:
A) a project based on a provided dataset.

- Dataset project involves analyzing and interpreting the data already collected to answer research questions.
- The list of available datasets will be provided on the unit Moodle page.

OR
B) a short hands-on research project

- Hands-on project may involve experiment, laboratory work, field work, measurements, or observation to collect data and analyse the results.
- The list of available hands-on research will be provided on the unit Moodle page.
- Please note, there are limited number of hands-on projects available. The feasibility of doing a hands-on project must be decided in consultation with Unit Coordinator and associated Discipline Leaders prior to the end of week one (1).

There are **two (2) parts** to your research proposal:

- **Part 1** will include your project title, aim(s) and research question(s) (100 - 150 words). It accounts for 5% of the weighing for this assessment task and needs to be submitted by ***Friday of Week 3 (30 July 2021)***.
- **Part 2** will include background and significance (based on literature review), methodology, expected outcomes, references (400 - 600 words). It accounts for 15% of the weighing for this assessment task and needs to be submitted by ***Friday of Week 5 (13 August 2021)***.

Proposal templates, assessment guide and additional materials to support development of your research Proposal will be

provided on the unit Moodle page.

Assessment Due Date

Part 1: Friday 30 July (Week 3) 5 pm AEST & Part 2: Friday 13 August (Week 5) 5 pm AEST

Return Date to Students

Return 2 weeks following submission

Weighting
20%

Minimum mark or grade
Students are required to obtain at least 50% of allocated marks for this assessment task, in order to pass the unit.

Assessment Criteria
Part 1 accounts for 5% and Part 2 for 15% of the weighing for this assessment task (**overall 20% of your unit total mark**).
The Proposal Templates provide an overview of the requirements. The proposal will be assessed using a marking rubric available on the Moodle page.

The marking criteria for Part 1 will include:

- Clarity and accuracy of project title, question(s) and aim(s)

The marking criteria for Part 2 will include:

- Clarity and completeness of background (summary of literature review) and significance
- Accuracy and quality of methodology/experimental approaches and analysis proposed for the project and expected outcomes
- Accuracy of referencing, citation and compliance with submission requirements

Feedback: The marking rubric includes criteria to help identify your weaknesses and strengths. 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

- Harvard (author-date)
- American Psychological Association 7th Edition (APA 7th edition)

Submission
Online

assessmentOutcome

- Develop and deliver a concise research proposal

assessmentGradAttribute

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

2 Oral Presentation

Assessment Type
Presentation

Task Description
Presenting research ideas and proposals, and research findings at scientific conferences, funding organisations and professional development meetings is a critical step in developing and conducting high-quality research. It is through the feedback you receive from audience and colleagues that you can identify the ways to improve your research. Also, as an audience in these presentations, you will learn from others and increase your knowledge and skill, and maybe learn new research methods or interesting facts. In this assessment, you will have the opportunity to learn the skills of presenting

your research proposal, and reviewing and providing constructive feedback to your peers.

There are **two (2) parts** involved in the completion of this assessment :

- **Part 1**: you are required to **submit an oral presentation** (10 to 15 minutes) on the proposed project via a webcam or video recording by ***Friday of Week 7 (3 September 2021)***. For this you should make PowerPoint slides (no more than 15 slides) explaining your proposed research, its significance and the methods you propose to answer research questions. This part **accounts for 25% of the weighing** for this assessment task.
- **Part 2**: you are required to **review and assess presentations submitted by your peers** by ***Friday of Week 9 (17 September 2021)***. You will rate your own presentation and 3-4 of your peer's presentation. Information on how to complete this self and peer assessment will be provided on the unit Moodle page. This part **accounts for 5% of the weighing** for this assessment task.

Additional information will be provided on the unit Moodle page. For students who do not have software for a webcam recording, Camtasia can usually be downloaded for a 30-day free trial. Download and Help links are provided on the unit Moodle page. Alternatively, you can use Zoom for recording your presentation.

Assessment Due Date

Part 1 (oral presentation): Friday 3 September (Week 7) 5pm AEST & Part 2 (self and peer assessment): Friday 17 September (Week 9) 5pm AEST

Return Date to Students

Return 2 weeks following submission

Weighting
30%

Minimum mark or grade
Students are required to obtain at least 50% of allocated marks for this assessment task, in order to pass the unit.

Assessment Criteria
Part 1 (Oral Presentation) **accounts for 25%** of the weighing and **Part 2** (self and peer assessment) **accounts for 5%** of the weighing for this assessment (**together this assessment worth 30% of your final mark**).
Your Presentation will be assessed using a marking rubric available on the Moodle page.
The marking criteria include:

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

The self and peer assessment section will have similar structure to the above mentioned criteria. Your rates will be reviewed and moderated if required. Further information on this section will be provided during the term.

Feedback: The marking rubric includes criteria to help identify your weaknesses and strengths. 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

- Harvard (author-date)
- American Psychological Association 7th Edition (APA 7th edition)

Submission
Online

Submission Instructions
To upload your oral presentation, you should use YouTube and upload your recording as "unlisted" video (which makes your video only available to ones you share the link with). You need to submit your link in a word document using the Moodle assessment submission system. The detailed structure for video submission will be provided in the Assessment Guideline, available in the Assessment Resources section of the unit Moodle page.

assessmentOutcome

- Develop and deliver a concise research proposal
- Apply scientific research methodologies to complete a research project

- Present research findings via written and oral presentations.

assessmentGradAttribute

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

3 Manuscript

Assessment Type
Written Assessment

Task Description
Dissemination of knowledge and research discoveries to the scientific communities is 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. You are required to submit your **manuscript** by ***Friday of Week 12***.

Your manuscript should be between **2000 – 2500 words** and should include the following section:

- Abstract: summary of the research and its findings in a structured way
- Introduction: definition of the topic and discussion on what is known (literature review), the gaps and the significance of the study, and the aim and research questions
- Method: description of the materials, methods and analyses used to answer research questions
- Results: presentation of the findings of the research in a clear and concise way in text, tables and figures
- Discussion: interpretations of the findings and how they compare with literature, what they add and what are the limitations
- Conclusion: summary of the findings, and meaningful and supported suggestions for the application of the findings
- References to the literature used and cited in the manuscript

Template, assessment guide and additional materials to support your development of Manuscript will be provided on the unit Moodle page.

Assessment Due Date
Week 12 Friday (8 Oct 2021) 5:00 pm AEST

Return Date to Students

Return 2 weeks after Friday of Week 12

Weighting
50%

Minimum mark or grade
Students are required to obtain at least 50% of allocated marks for this assessment task, in order to pass the unit.

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

Feedback: The marking rubric includes criteria to help identify your weaknesses and strengths. A 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

- Harvard (author-date)
- American Psychological Association 7th Edition (APA 7th edition)

Submission
Online

assessmentOutcome

- Develop and deliver a concise research proposal
- Apply scientific research methodologies to complete a research project
- Present research findings via written and oral presentations.

assessmentGradAttribute

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- 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