



ESSC11004 Study and Research Skills for Health Science

Term 1 - 2022

Profile information current as at 26/04/2024 02:27 pm

All details in this unit profile for ESSC11004 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 is a foundation level unit to help you develop the academic study and research skills necessary for success in tertiary level education. During this unit you will learn how to use bibliographical software, search scientific research databases, and appraise the quality of evidence presented in scientific and other literature. You will also learn about research ethics and integrity, and develop a foundational understanding of the use of statistics in research. Finally, you will learn fundamental concepts of scientific writing to ensure you can articulate the information you retrieve and appraise, in a clear and concise manner.

Details

Career Level: *Undergraduate*

Unit Level: *Level 1*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

There are no requisites for this unit.

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 - 2022

- Bundaberg
- Cairns
- Mackay City
- Online
- Rockhampton

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. **Online Test**

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

Feedback

Moodle layout was great and easy to find content quickly.

Recommendation

It is recommended that the Moodle design remains simple to enable students to access information in as few clicks as possible.

Feedback from Have Your Say

Feedback

Specific example readings and discussion were skewed towards Health Sciences and Exercise and Sport Science. Some examples from other study areas would help different cohorts.

Recommendation

As this unit includes students from a variety of courses, it is recommended that some examples from different study areas are included to assist in the application of this content towards their studies.

Feedback from Self-reflection

Feedback

Specific content related to referencing, in particular APA referencing is required.

Recommendation

It is recommended that a lecture and tutorial focused on the importance of referencing, and how to reference correctly be created

Unit Learning Outcomes

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

1. Source and critically evaluate scholarly research information
2. Demonstrate effective scientific research writing skills
3. Identify appropriate study designs and statistical tests to answer various research questions
4. Distinguish between ethical and unethical practices in research.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

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

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4
1 - Communication			•	
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 - Online Test - 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)
- Adobe Acrobat Reader (or similar) software for viewing PDF documents.
- ZOOM Videoconferencing software. A ZOOM account is available with your student credentials. We will use this software for any relevant meetings.

Referencing Style

All submissions for this unit must use the referencing style: [American Psychological Association 7th Edition \(APA 7th edition\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Nathan Elsworthy Unit Coordinator
n.elsworthy@cqu.edu.au

Schedule

Week 1 - 07 Mar 2022

Module/Topic	Chapter	Events and Submissions/Topic
You want me to do what? Unit overview and introduction to critical thinking.	Compulsory Reading: Oyler, D. R., & Romanelli, F. (2014). The fact of ignorance: Revisiting the Socratic method as a tool for teaching critical thinking. <i>American Journal of Pharmaceutical Education</i> , 78(7), Article 144. https://doi.org/10.5688/ajpe787144 Supplementary readings available on Moodle.	

Week 2 - 14 Mar 2022

Module/Topic	Chapter	Events and Submissions/Topic
If it hasn't been done yet, why is it called 'research'?	Compulsory Reading: Thomas, D. R., & Hodges, I. D. (2010). Developing research aims and objectives designing and managing your research project: Core skills for social and health research. London, UK: SAGE Publications. Supplementary readings available on Moodle.	

Week 3 - 21 Mar 2022

Module/Topic	Chapter	Events and Submissions/Topic
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The good, the bad, and the ugly:
Finding the research you need.

Compulsory Reading:

Hendrick, P. A., Ahmed, O. H., Bankier, S. S., Chan, T. J., Crawford, S. A., Ryder, C. R., . . . Schneiders, A. G. (2012). Acute low back pain information online: an evaluation of quality, content accuracy and readability of related websites. *Manual Therapy, 17*(4), 318-324.
<https://doi.org/10.1016/j.math.2012.02.019>

Supplementary readings available on Moodle.

Week 4 - 28 Mar 2022

Module/Topic

Chapter

Events and Submissions/Topic

So you have your papers, now what?
Dissecting a research paper.

Compulsory Reading:

Pettis, J. S., Lichtenberg, E. M., Andree, M., Stitzinger, J., Rose, R., & vanEngelsdorp, D. (2013). Crop pollination exposes honey bees to pesticides which alters their susceptibility to the gut pathogen *Nosema ceranae*. *PLOS ONE, 8*(7), Article e70182.
<https://doi.org/10.1371/journal.pone.0070182>

Online Test 1 Opens: Week 4 Friday (1 Apr, 2022) 9:00 am AEST

Supplementary readings available on Moodle.

Week 5 - 04 Apr 2022

Module/Topic

Chapter

Events and Submissions/Topic

Evaluating and acknowledging the evidence.

Compulsory Reading:

Katrak, P., Bialocerkowski, A. E., Massy-Westropp, N., Kumar, S., & Grimmer, K. A. (2004). A systematic review of the content of critical appraisal tools. *BMC Medical Research Methodology, 4*, Article 22.
<https://doi.org/10.1186/1471-2288-4-22>

Online Test 1 Due: Week 5 Friday (8 Apr, 2022) 5:00 pm AEST.

The Abridged American Psychological Association Referencing Style Guide (APA) 2021. CQUniversity. Link available on Moodle

Supplementary readings available on Moodle.

Vacation Week - 11 Apr 2022

Module/Topic

Chapter

Events and Submissions/Topic

No lectures this week.

Week 6 - 18 Apr 2022

Module/Topic

Chapter

Events and Submissions/Topic

Strategies for effective scientific writing and communication.

Compulsory Reading:

Bhardwaj, P., Sinha, S., & Yadav, R. K. (2017). Medical and scientific writing: Time to go lean and mean. *Perspectives in Clinical Research, 8*(3), 113-117.
https://doi.org/10.4103/picr.PICR_11_17

Written Assessment Part A Due: Week 6 Tuesday (19 Apr, 2022) 5:00 pm AEST.

Supplementary readings available on Moodle.

Week 7 - 25 Apr 2022

Module/Topic

Chapter

Events and Submissions/Topic

Compulsory Reading:

What do science and Hollywood have in common? Telling a good story.

Owen, N., Healy, G. N., Matthews, C. E., & Dunstan, D. W. (2010). Too much sitting: the population health science of sedentary behavior. *Exercise and Sport Sciences Reviews*, 38(3), 105-113.
<https://doi.org/10.1097/jes.0b013e3181e373a2>

Supplementary readings available on Moodle.

Week 8 - 02 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
Avoiding the fatal 4: Plagiarism, fake research, outdated research, and not following the guidelines.	Compulsory Reading: Jha, K. N. (2014). How to write articles that get published. <i>Journal of Clinical and Diagnostic Research</i> , 8(9), XG01-XG03. https://doi.org/10.7860/jcdr/2014/8107.4855 Supplementary readings available on Moodle.	Online Test 2 Opens: Week 8 Friday (6 May, 2022) 9:00 am AEST

Week 9 - 09 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
Doing it right, doing it safe: Risk management and ethical concepts in research.	Compulsory Reading: Bryden, D., & Storey, I. (2011). Duty of care and medical negligence. <i>Continuing Education in Anaesthesia Critical Care & Pain</i> , 11(4), 124-127. https://doi.org/10.1093/bjaceaccp/mkr016 Supplementary readings available on Moodle.	Online Test 2 Due: Week 9 Friday (13 May, 2022) 5:00 pm AEST.

Week 10 - 16 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
Lies, more lies, and statistics.	Compulsory Reading: Main, M. E., & Oqaz, V. L. (2016). Common statistical tests and interpretation in nursing research. <i>International Journal of Faith Community Nursing</i> , 2(3), Article 2. https://doi.org/10.1097/01.aacn.0000318124.33889.6e Supplementary readings available on Moodle.	

Week 11 - 23 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
All these statistical tests! How do I know what test to use?	Compulsory Reading: Ali, Z., & Bhaskar, S. B. (2016). Basic statistical tools in research and data analysis. <i>Indian Journal of Anaesthesia</i> , 60(9), 662-669. https://doi.org/10.4103/0019-5049.190623 Supplementary readings available on Moodle.	

Week 12 - 30 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
Going backward - moving forward: How to apply all this to your future studies.	No readings this week.	Written Assessment Part B Due: Week 12 Tuesday (31 May, 2022) 5:00 pm AEST. Online Test 3 Opens: Week 12 Friday (3 Jun, 2022) 9:00 am AEST

Review/Exam Week - 06 Jun 2022

Module/Topic	Chapter	Events and Submissions/Topic
		Online Test 3 Due: Review/Exam Week Friday (10 Jun, 2022) 5:00 pm AEST.

Exam Week - 13 Jun 2022

Assessment Tasks

1 Online test

Assessment Type

Online Test

Task Description

The Online Test will comprise of three (3) separate Online Tests made up of multiple choice and fill-in-the-blank questions.

Each Online Test is to be completed on your own using multiple resources to help you answer the questions. It is your responsibility to log on to Moodle and complete each Online Test during the time the test is available. In the absence of an approved extension there will be no late submissions allowed for any of the Online Tests that make up this assessment item.

Online Test 1 (10% of final grade)

Online Test 1 will be due in Week 5. Online Test 1 questions will be related to lectures, tutorials, and compulsory readings associated with Weeks 1 - 4 (inclusive). Online Test 1 will contain 20 questions and you will have 40 minutes to complete this Online Test.

You can only attempt Online Test 1 once and it must be completed in a single session. You cannot save your answers and return to this Online Test at a later time.

Online Test 1 will be available from Week 4 Friday (1 Apr, 2022) 9:00 am AEST until Week 5 Friday (8 Apr, 2022) 5:00 pm AEST. You must log into Moodle during this time period to complete Online Test 1.

Online Test 2 (10% of final grade)

Online Test 2 will be due in Week 9. Online Test 2 questions will be related to lectures, tutorials, and compulsory readings associated with Weeks 5 - 8 (inclusive). Online Test 2 will contain 20 questions and you will have 40 minutes to complete this Online Test.

You can only attempt Online Test 2 once and it must be completed in a single session. You cannot save your answers and return to this Online Test at a later time.

Online Test 2 will be available from Week 8 Friday (6 May, 2022) 9:00 am AEST until Week 9 Friday (13 May, 2022) 5:00 pm AEST. You must log into Moodle during this time period to complete Online Test 2.

Online Test 3 (10% of final grade)

Online Test 3 will be due in the Review/Exam Week. Online Test 3 questions will be related to lectures, tutorials, and compulsory readings associated with Weeks 9 - 11 (inclusive). Online Test 3 will contain 20 questions and you will have 40 minutes to complete this Online Test.

You can only attempt Online Test 3 once and it must be completed in a single session. You cannot save your answers and return to this Online Test at a later time.

Online Test 3 will be available from Week 12 Friday (3 Jun, 2022) 9:00 am AEST until Review/Exam Week Friday (10 Jun, 2022) 5:00 pm AEST. You must log into Moodle during this time period to complete Online Test 3.

Assessment Due Date

The three (3) Online Tests will be administered at various time points as described in the Task Description.

Return Date to Students

Marks will be available on completion of each Online Test and individual feedback and correct responses will be made available when each online test closes.

Weighting

30%

Assessment Criteria

Responses to Online Test questions will be marked as correct or incorrect by the Moodle Online Quiz System, and tabulated to give your mark for each Online Test. For questions with text-based responses (e.g. fill in the blank) you should take care with spelling (Australian English) and grammar, as answers are spelling and grammar sensitive.

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

Submission

Online

Submission Instructions

You must log in to Moodle to complete the Online Test. A link to each Online Test can be found in the 'Assessment' tile on Moodle. Once you have completed the Online Test, you must click the 'Submit' button to submit your responses. If you do not answer all 20 questions within the 40 minute time period, there will be a 3 minutes grace period during which you can submit your Online Test responses, but you will not be able to attempt any further questions.

Learning Outcomes Assessed

- Source and critically evaluate scholarly research information
- Identify appropriate study designs and statistical tests to answer various research questions
- Distinguish between ethical and unethical practices in research.

Graduate Attributes

- Communication
- Information Technology Competence
- Ethical practice

2 Written assessment

Assessment Type

Written Assessment

Task Description

This assessment task comprises two (2) parts; **Part A**, and **Part B**.

Part A. Due date: Week 6 Tuesday (19 Apr, 2022) 5:00 pm AEST. Part A is worth 30% of your overall grade.

For **Part A**, you will prepare an annotated bibliography. An annotated bibliography is a brief account of the peer-reviewed literature on a specific topic, where you reflect on, summarise, critique, or otherwise evaluate the literature. For this task, you will select three (3) peer-reviewed original research articles (original studies only, not reviews, editorials, theses, or other types of work) on a specific topic related to your discipline (i.e. the course you are enrolled in). You will be free to choose a topic which interests you, but all three (3) peer-reviewed original research articles must be on the same topic, and the topic must be related to the discipline area in which you are enrolled. For example, if you are enrolled in the Bachelor of Exercise and Sport Sciences course (CG85), you should choose a topic related to exercise and sport sciences. Your annotated bibliography will comprise the citation for each peer-reviewed original research article, followed by 1-2 sentences on each of the following points:

1. The aim or purpose of the study (Why did the researchers do their study?)
2. Methods used in the study (How did the researchers undertake the study?)
3. Findings of the study (What did the results of the study show?)
4. Evaluative comments (How is this study relevant to your discipline or area of study? What does it add to what is already known?)

Marks are also awarded based on referencing in the appropriate style. The page limit for each annotation is one (1) A4 page formatted using the guidelines available on Moodle. Specific examples of annotated bibliographies will be provided on Moodle. In the absence of an approved extension, any submissions received after the due date will incur penalties in accordance with University policy.

Written Assessment Part A must be submitted as a Microsoft Word document (.doc or .docx).

Part B. Due date Week 12 Tuesday (31 May, 2022) 5:00 pm AEST. Part B is worth 40% of your overall grade.

Part B is an extension of your annotated bibliography. You will source three (3) additional peer-reviewed original research articles (original studies, not reviews, editorials, theses, or other types of work) on the same topic as that used for Part A and then write a brief summary of between 800 - 1000 words which compares and contrasts all six (6) peer-reviewed original research articles that you have found. The words contained in the title and the references do not count toward the word limit. You must use only the following six (6) headings when preparing Part B of this assignment:

1. Title (A name for your summary.)
2. Introduction (A brief description of the topic.)
3. Methods (What databases did you search and what search terms or key words did you use?)
4. Discussion (Compare and contrast the main findings from all six (6) included peer-reviewed manuscripts.)
5. Conclusion (What can you conclude from your comparison of the literature?)

6. References (A list of the peer-reviewed manuscripts included in this assessment item, formatted according to APA guidelines.)

A sample template with instructions will be available on Moodle as a PDF file, so you can see how Part B of this assessment item should be presented. In the absence of an approved extension, any submissions received after the due date will incur penalties in accordance with University policy.

Written Assessment Part B must be submitted as a Microsoft Word document (.doc or .docx).

Assessment Due Date

Written Assessment Part A is due Week 6 Tuesday (19 Apr, 2022) 5:00 pm AEST. Written Assessment Part B is due Week 12 Tuesday (31 May, 2022) 5:00 pm AEST.

Return Date to Students

Marks for Part A will be available two (2) weeks after assignment due date Tuesday (3 May, 2022) and Part B of this assignment will be available after certification of grades (8 Jul, 2022)

Weighting

70%

Assessment Criteria

For **Part A**, marks will be awarded according to whether or not each point has been addressed, and on writing style, presentation, grammar and spelling, and appropriate formatting of citations. Marks will be awarded using a marking rubric which is available on Moodle.

For **Part B**, marks will be awarded based on adherence to the submission instructions, content for each section of the summary (particularly the comparison of the studies you have found), writing style, and appropriate formatting of in-text citations and accuracy in referencing. Marks will be awarded using a marking rubric which is available on Moodle.

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

Submission

Online

Submission Instructions

Submit Written Assessment Part A and Part B via the respective assessment item submission links on Moodle.

Learning Outcomes Assessed

- Source and critically evaluate scholarly research information
- Demonstrate effective scientific research writing skills

Graduate Attributes

- Critical Thinking
- Information Literacy
- Information Technology Competence

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