

Profile information current as at 14/12/2025 03:41 pm

All details in this unit profile for ECHO11003 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 an insight into the science of cardiac assessment by exploring the role and scope of practice of the cardiac physiologist and echocardiographer within the Australian health care system. You will acquire knowledge of communication strategies used in clinical practice and explore the types of cardiac testing procedures available and the outcomes of those assessments. You will apply your knowledge and skills to demonstrate procedures for the provision of safe patient care, ultrasound scanning coordination, spatial awareness and grey-scale pattern recognition in a simulated clinical environment. The aim of this unit is to provide introductory knowledge and skill that will support your learning throughout the Echocardiography / Cardiac Physiology course.

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

Pre-requisite Students must be enrolled in CV69 Bachelor of Echocardiography and Cardiac Physiology / Graduate Diploma of Echocardiography

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

• Mixed Mode

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: 40%

2. Practical Assessment

Weighting: Pass/Fail 3. **Online Test** Weighting: 60%

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 <u>University's Grades and Results Policy</u> 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 <u>CQUniversity Policy site</u>.

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 Evaluation forms

Feedback

Students enjoyed the residential school, and greatly appreciated the hands on scanning time available.

Recommendation

Residential school format will be continued in the next delivery as student feedback was positive.

Feedback from SUTE Survey

Feedback

Students reported that the feedback for the written assessment could be turned around faster.

Recommendation

The written assessment format, timing of submission, and marking strategy will be reviewed.

Feedback from SUTE Survey

Feedback

Students responded positively to tutorials and weekly revision questions.

Recommendation

Tutorial style/component and weekly revision will be continued in in the next delivery.

Unit Learning Outcomes

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

- 1. Define the scope of practice and professional requirements of cardiac physiologists and echocardiographers, including legal and ethical considerations
- 2. Discuss the provision of cardiac assessment within the context of general diagnostic services in the Australia health care system
- 3. Employ common communication strategies used in the healthcare environment
- 4. Apply introductory level knowledge of ultrasound equipment, image acquisition and interpretation, body and cardiac imaging planes, using appropriate terminology
- 5. Demonstrate knowledge of safe practice, including infection control and ergonomic principles.

Linked to National and International Standards

- 1. ASAR Accreditation Standards for Cardiac Sonography critical practice Unit 8 Cardiac, Foundation units of competence 1- 5.
- 2. European Association of Cardiovascular Imaging Core Syllabus
- 3. American Registry for Cardiac Sonography Core Syllabus

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

Assessment lasks	Learning Outcomes					
	1	2	3	4	5	

Assessment Tasks		Lea	rning	g Out	com	es				
		1		2		3		4		5
1 - Practical Assessment - 0%						•		•		•
2 - Written Assessment - 40%		•		•						
3 - Online Test - 60%		•		•		•		•		•
Alignment of Graduate Attributes to Learnii	ng Out	tcor	nes							
Graduate Attributes			Lea	arnin	g Ou	tcom	es			
			1		2	3	3	4		5
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 - Practical Assessment - 0%	•	•			•	•	•	•		
2 - Written Assessment - 40%	•	•	•	•		•	•	•	•	
3 - Online Test - 60%	•	•		•			•		•	

Textbooks and Resources

Textbooks

ECHO11003

Prescribed

Echocardiography: The normal examination

3rd Edition (1)

Authors: Bonita Anderson

Echotext Pty Ltd

Brisbane, Queensland, Australia

ISBN: 978-0-9923222-1-2 Binding: Hardcover

Additional Textbook Information

Some suggested textbooks may be digital while the prescribed text above is not and will need to be purchased. All journals and articles will be available online.

View textbooks at the CQUniversity bookshop

You will need access to the following IT resources:

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

View textbooks at the CQUniversity Bookshop

IT Resources

You will need access to the following IT resources:

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

Referencing Style

All submissions for this unit must use the referencing style: Vancouver

For further information, see the Assessment Tasks.

Teaching Contacts

Kim Prince Unit Coordinator

k.prince@cqu.edu.au

Schedule

Week 1 - 07 Mar 2022							
Module/Topic	Chapter	Events and Submissions/Topic					
Role and scope of practice	See eReading list for additional online resources, ie supporting articles and documents.	Order CQUniversity uniform from the Bookshop for the Residential School in Week 9					
Week 2 - 14 Mar 2022							
Module/Topic	Chapter	Events and Submissions/Topic					

The Australian healthcare system	See eReading list for additional online resources, ie supporting articles and documents.	
Week 3 - 21 Mar 2022		
Module/Topic	Chapter	Events and Submissions/Topic
Diagnostic services	See eReading list for additional online resources, ie supporting articles and documents.	
Week 4 - 28 Mar 2022		
Module/Topic	Chapter	Events and Submissions/Topic
Communication	See eReading list for additional online resources, ie supporting articles and documents.	
Week 5 - 04 Apr 2022		
Module/Topic	Chapter	Events and Submissions/Topic
Clinical indications	See eReading list for additional online resources, ie supporting articles and documents.	
Vacation Week - 11 Apr 2022		
Module/Topic	Chapter	Events and Submissions/Topic
Work 6 19 Amy 2022		
Week 6 - 18 Apr 2022 Module/Topic	Chapter	Events and Submissions/Topic
Ploddic, Topic	See eReading list for additional online	•
Infection control and vital signs	resources, ie supporting articles and documents.	Written assessment Due: Week 6 Friday (22 Apr 2022) 5:00 pm AEST
Week 7 - 25 Apr 2022		
Module/Topic	Chapter	Events and Submissions/Topic
Gross cardiac anatomy	See eReading list for additional online resources, ie supporting articles and documents.	
Week 8 - 02 May 2022		
Module/Topic	Chapter	Events and Submissions/Topic
Two-dimensional Echocardiography and image orientation	See eReading list for additional online resources, ie supporting articles and documents.	Compulsory Lab Induction Checklist Due: Week 8 Friday (6th May 2022) 5:00 pm AEST
Week 9 - 09 May 2022		
Module/Topic	Chapter	Events and Submissions/Topic
Residential school	See eReading list for additional online resources, ie supporting articles and documents.	Practical assessment Due: Week 9 Friday (13 May 2022) 3:00 pm AEST
Week 10 - 16 May 2022		
Module/Topic	Chapter	Events and Submissions/Topic
Safe practice	See eReading list for additional online resources, ie supporting articles and documents and residential school lab manuals.	
Week 11 - 23 May 2022		
Module/Topic	Chapter	Events and Submissions/Topic
Legal frameworks	See eReading list for additional online resources, ie supporting articles and documents.	

Week 12 - 30 May 2022							
Module/Topic	Chapter	Events and Submissions/Topic					
Revision							
Review/Exam Week - 06 Jun 2022							
Module/Topic	Chapter	Events and Submissions/Topic					

Term Specific Information

Unit Coordinator and Contact Details

Your unit coordinator for ECHO11003 Fundamentals of Cardiac Science is Kim Prince. The most efficient and preferred method of contacting Kim is via the Q&A forum located on the unit Moodle site. However, if your query is of a personal nature, please contact Kim directly via email: k.prince@cqu.edu.au or phone: 07 30234244. Kim's office days are Wednesday, Thursday and Friday.

Tutorials

Tutorials for this unit will be delivered 'live' online using Zoom. The tutorial links will be provided on the unit Moodle site. Tutorials will be hosted on Thursday afternoons at 3pm AEST. The sessions will also be recorded and subsequently made available on Moodle. The tutorials will incorporate a discussion of the weekly content delivered and associated revision material. Advice will also be provided to support preparation for related assessments. It is highly encouraged for students to attend these sessions for further understanding and development of knowledge and participate in discussions.

Unit Study Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5hrs of study per week. A break down example of time management for this unit is below.

- 3 hours watching recorded lectures
- 2 hours completing recommended readings
- 1.5 hours creating study notes
- 1 hour completing weekly study questions
- 1 hour participating in/or viewing the weekly tutorial
- 4 hours preparing for the written assessment, practical assessments or the final examination

Compulsory Residential School

You must attend the Residential School at your enrolled campus only. Prior to attendance, you are required to complete the online lab induction for your campus of enrolment and upload the lab induction checklist to Moodle. The links required for accessing the online lab induction and lab induction checklist are provided on the unit Moodle site. This documentation is required to comply with CQUniversity's Occupational Health and Safety policy.

Please ensure that you complete all the activities listed under the orientation tile on the Moodle site upon first enrolment.

Assessment Tasks

1 Written assessment

Assessment Type

Written Assessment

Task Description

As valued members of an inter-professional team, it is important that cardiac physiologists/echocardiographers are able to demonstrate knowledge and understanding of cardiovascular diseases occurrence, common cardiac diagnostic tests, professional requirements and emerging health reform policies. This assessment requires you to create a peer information report for the benefit of health professionals from other fields. The report will consist of four main sections and a conclusion, with approximately 200 words per section. You may use lectures, tutorials and relevant materials provided on the unit Moodle site. In addition to the unit materials provided, you must research current literature to

develop your responses. The four main sections to be discussed include:

Section 1 - Introduction

Define cardiovascular disease and discuss the epidemiological distribution (frequency, pattern) of cardiovascular disease globally, and in Australia.

- Identify risk factors that contribute to the development of cardiovascular disease.
- Include any appropriate image/s to enhance content and understanding of the above.

Section 2- Body

List common diagnostic procedures that are used to investigate cardiovascular disease (this can be in the form of a table).

Using the diagnostic test: Exercise stress echocardiogram, describe the following:

- Why this test is performed.
- How this test is performed and what the results may indicate. Include an appropriate image to enhance content and understanding.
- Provide an example of an authoritative source where patients and/or health professionals can source further information on this procedure.

Include an appropriate image to enhance content and understanding.

Provide an example of an authoritative source where patients and/or health professionals can source further information on this procedure.

Section 3 - Body

Continuing professional development (CPD) is mandatory in Australia to maintain professional standards and to meet CPD requirements. Briefly describe how cardiac sonographers in Australia maintain continuing professional development. Ensure to include:

- How often a cardiac sonographer is required to record CPD.
- Via which methods can a cardiac sonographer gain CPD points (refer to the ASAR CPD table).
- How CPD is recorded in Australia.
- Are student sonographers required to record CPD?

Section 4 - Body

Research health reforms in Australia and chose ONE policy or strategy that has the potential to improve the lives of patients living with cardiovascular disease. You may wish to consider preventative strategies, health service improvements or health infrastructure advancements.

- Define the problem.
- Describe the solution.

Discuss the impact and include in your answer:

- 1. A minimum of TWO benefits of this policy or strategy, and
- 2. A minimum of TWO limitations or barriers to the policy or strategy.

Include an appropriate image to enhance content and understanding.

Section 5:

Conclude with a summarised key message of the assessment.

Word Count

1000 words +/- 10% word count does not include headings, images, figures, table titles, axis labels or reference list. Descriptive captions are considered within the word count.

Format and submission

- A4 format
- Orientation portrait
- Footer with student name, email and phone number
- Header with page numbers
- Title
- Student name
- Student number
- Unit number
- Assessment title
- Word count

Submit online via Moodle.doc or docx files ONLY.

You are required to submit a copy to Turnitin. Please allow time to review your Turnitin results and implement changes if required prior to the assessment due date.

In the absence of an approved extension request or there are not sound reasons for a late submission, a penalty of five percent (5%) of the total available marks for the assessment will be deducted for each full or part calendar day the assessment task is overdue.

Assessment Due Date

Week 6 Friday (22 Apr 2022) 5:00 pm AEST

Return Date to Students

Students will receive feedback within two (2) weeks of the due date.

Weighting

40%

Minimum mark or grade

50%

Assessment Criteria

You will be assessed using the Written Assessment marking rubric on your ability to:

- Locate and critically evaluate information.
- Recognize pertinent professional information.
- Discuss the provision of a common cardiac assessment.
- Discuss professional requirements of an echocardiographer.

A downloadable copy of the Written Assessment task rubric can be found on the Moodle site.

Referencing Style

• Vancouver

Submission

Online

Submission Instructions

Submission via Moodle

Learning Outcomes Assessed

- Define the scope of practice and professional requirements of cardiac physiologists and echocardiographers, including legal and ethical considerations
- Discuss the provision of cardiac assessment within the context of general diagnostic services in the Australia health care system

Graduate Attributes

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

2 Practical assessment

Assessment Type

Practical Assessment

Task Description

Students will be required to practice high-quality hygiene practices and demonstrate appropriate scanning and interpretation skills throughout this practical assessment.

Students will use theoretical knowledge from lectures and tutorials as well as skills and information provided at the residential school to perform these assessments under the supervision of a tutor/assessor.

Practical assessment task 1: Hand hygiene

• Demonstrate competency in the performance of effective hand washing (safe practice) using soap and water.

Practical assessment task 2: Introduction to Echocardiographic scanning skills

- Demonstrate introductory knowledge of cardiac ultrasound scanning, probe manipulation and scan sector orientation.
- Demonstrate professional behaviour and safe practice.
- Identify sector orientation.
- Manipulate the transducer.
- Use appropriate terminology.

A time limit of 10min will be applied to practical assessment task 2.

You must be available to act as a patient model for peer practical assessments. You may have to be a patient model on more than one occasion.

You cannot request who you scan for your practical assessment.

Assessment Due Date

Week 9 Friday (13 May 2022) 3:00 pm AEST

During residential school

Return Date to Students

Immediate feedback

Weighting

Pass/Fail

Assessment Criteria

Students will be assessed using the Practical assessment task 1 marking rubric and Practical assessment task 2 marking rubric, on your ability to:

- Demonstrate professional behaviour and safe practice.
- Demonstrate introductory knowledge of cardiac ultrasound scanning.
- Identify sector orientation.
- Manipulate the transducer.
- Use appropriate terminology.

This is a PASS/FAIL assessment. Pass means that the standard of practice displayed is at or above the performance criteria outlined in the marking rubric. To be deemed competent and pass, all action criteria boxes must be performed correctly.

Tasks are graded separately so that if one is passed and another is not, only the failed task must be repeated successfully to pass overall. Following provision of assessment feedback, only one opportunity for re-sit of any failed tasks will be provided.

Practical assessment re-sits will be held on the same day as the original attempt (Friday 13th May 2022). All enrolled students must be available to act as a patient model for peer re-sits if requested by the unit coordinator.

Referring style

Vancouver

Submission

In person

Referencing Style

• Vancouver

Submission

No submission method provided.

Submission Instructions

During residential school in person

Learning Outcomes Assessed

• Employ common communication strategies used in the healthcare environment

- Apply introductory level knowledge of ultrasound equipment, image acquisition and interpretation, body and cardiac imaging planes, using appropriate terminology
- Demonstrate knowledge of safe practice, including infection control and ergonomic principles.

Graduate Attributes

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

3 Online test

Assessment Type

Online Test

Task Description

Students are required to respond to a series of questions (drawn from lectures, readings, tutorials, and laboratory sessions) via an online test, within the prescribed time frame. This online test will assess your understanding of the content presented throughout the unit delivery. Questions will be drawn from a resource bank, to allow the online test to be different for each student. All unit content presented in lectures, tutorial presentations, at the residential school and within prescribed readings is assessable. The online test may include multiple choice, short answer, calculation or image interpretation style questions. Students are encouraged to have a calculator available when sitting the test.

To successfully complete the online test, students must:

- Access the online test via ECHO11003 Moodle at the assigned time.
- Attempt the online test only once (once started, the online test cannot be paused).
- Prepare personal notes and have a calculator when attempting the Online Test.
- Undertake the Online Test as an individual (questions are drawn from a question pool to allow a different online
 test for each student; any incidences of academic misconduct lead to action from the Deputy Dean of Learning
 and Teaching).
- Notify relevant staff and TASAC if technical issues arise during the Online Test; TASAC is available for immediate assistance during AEST business hours).

Please note:

It is important that you commence the Online Test before 5:50 pm (AEST) on Friday 10th June 2022.

The Online Test will automatically close at 8:00 pm (AEST) on Friday the 10th of June 2022.

If you have not completed the test by this time, your test may be submitted incomplete or with no answers. In the absence of an approved extension, students will receive a mark of zero (or fail) for this assessment, if it is not completed by the scheduled date and time.

Students are reminded that IT support from the university Information and Technology Division (TASAC) is only available during AEST business hours.

Students are advised to refer to the 'Assessment Policy and Procedure (Higher Education Coursework)' document for additional university guidelines regarding assessments.

Assessment Due Date

Online test opens Thursday 9th June 2022 8:00am AEST and closes Friday 10th June 2022 8:00pm AEST.

Return Date to Students

Individual results will be published within two (2) weeks of the due date. The online test question pool in its entirety will not be released to students.

Weighting

60%

Minimum mark or grade

50%

Assessment Criteria

Question responses will be assessed according to your ability:

- to demonstrate sound knowledge of the scope and requirements of cardiac scientists within the context of the current Australian health care system.
- to use appropriate terminology and descriptors as well as grammar and spelling.
- to appropriately interpret presented sonographic images and cardiac assessment data.
- to succinctly respond with accurate answers.

The following details apply:

- Perusal time and online test duration will be 130 minutes in total.
- Open book conditions.

Graduate attributes:

- Communication
- Problem solving
- Critical Clinical Thinking
- Information Literacy
- Information Technology Competence Cross Cultural Competence Ethical practice
- Social Innovation

Referencing Style

Vancouver

Submission

Online

Learning Outcomes Assessed

- Define the scope of practice and professional requirements of cardiac physiologists and echocardiographers, including legal and ethical considerations
- Discuss the provision of cardiac assessment within the context of general diagnostic services in the Australia health care system
- Employ common communication strategies used in the healthcare environment
- Apply introductory level knowledge of ultrasound equipment, image acquisition and interpretation, body and cardiac imaging planes, using appropriate terminology
- Demonstrate knowledge of safe practice, including infection control and ergonomic principles.

Graduate Attributes

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

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 <u>Academic Learning Centre (ALC)</u> 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