

Profile information current as at 23/04/2024 11:06 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.

Corrections

Unit Profile Correction added on 30-03-20

The end of term examination has now been changed to an alternate form of assessment. Please see your Moodle site for details of the assessment. The Residential School and associated assessment item (i.e. Assessment 2 - Practical Assessment) for this unit has been postponed and you will need to complete this at a later date. This will not preclude you from enrolling in any units for which this unit is a pre-requisite. Further details about the Residential School will be made available on Moodle in due course.

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 the types of cardiac assessment techniques 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 <u>Assessment Policy and Procedure (Higher Education Coursework)</u>.

Offerings For Term 1 - 2020

• 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).

Residential Schools

This unit has a Compulsory Residential School for distance mode students and the details are: Click here to see your Residential School Timetable.

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. **Examination** 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 "Have Your Say" student survey.

Feedback

Students enjoyed the Residential School.

Recommendation

Continue to offer the Residential School in a similar format.

Feedback from "Have Your Say" student survey.

Feedback

Organisation and tutorial resources offered on the Moodle site assisted students in completing study tasks.

Recommendation

Update and continue to provide resources to assist students in organising their studies.

Feedback from "Have Your Say" student survey.

Feedback

Students felt that more direction and feedback could be provided for the the Written Assessment and Examination.

Recommendation

Provide enhanced direction and feedback for the Written Assessment, and offer more guidance to students in preparation for the Examination.

Unit Learning Outcomes

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

- 1. Discuss the provision of cardiac assessment within the context of general diagnostic services in the Australian Health Care System
- 2. Discuss the role and scope of practice of echocardiographers and cardiac physiologists, including professional and legal frameworks
- 3. Apply introductory-level knowledge and skill of cardiac assessment, anatomical planes and patient data using appropriate terminology
- 4. Perform clinical tasks which demonstrate safe practice in a simulated environment.

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 Tasks	Learning	Outcomes		
	1	2	3	4

Assessment Tasks	Learning Outcomes									
		1			2		3		4	ţ
1 - Practical Assessment - 0%							•		•	,
2 - Written Assessment - 40%		•			•					
3 - Examination - 60%		•			•		•			
Alignment of Graduate Attributes to Learn	ing Outo	com	es							
Graduate Attributes			Le	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 Gradua	te Attrib	ute	es							
Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Practical Assessment - 0%	•	•				•	•	•		
2 - Written Assessment - 40%	•	•	•	•		•	•	•	•	
3 - Examination - 60%	•			•		•	•	•	•	

Textbooks and Resources

Textbooks

ECHO11003

Prescribed

Echocardiography: The Normal Examination and Echocardiographic Measurements

Edition: Third (2017)
Authors: Bonita Anderson
Echotoxt Physiad

Echotext Pty Ltd

Australia

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

Additional Textbook Information

Anderson's "Echocardiography: The Normal Examination and Echocardiographic Measurement (Third Edition)" will be used throughout CV69 - BACHELOR OF ECHOCARDIOGRAPHY AND CARDIAC PHYSIOLOGY / GRADUATE DIPLOMA OF ECHOCARDIOGRAPHY. Please prioritise ordering this textbook before the commencement of Term 1. The textbook is available for purchase from the CQUniversity Bookshop at https://bookshop.cqu.edu.au/ (search on the Unit code).

View textbooks at the CQUniversity Bookshop

IT Resources

You will need access to the following IT resources:

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

Referencing Style

All submissions for this unit must use the referencing style: <u>Vancouver</u> For further information, see the Assessment Tasks.

Teaching Contacts

Laura Wylie Unit Coordinator l.wylie@cqu.edu.au

Ashley Spermon Unit Coordinator

a.spermon@cqu.edu.au

Schedule

Week 1 - 09 Mar 2020

Module/Topic

Chapter

Events and Submissions/Topic

Role and scope of practice of Echocardiographers and Cardiac Physiologists	Readings provided on Moodle: • ASA Standards of Practice • ASA Code of Conduct for Sonographers • COAG Health Council National Code of Conduct for Health Care Workers FAQ • The 21st Century Echocardiography Laboratory in Australia and New Zealand: Rapid Evolution of Training and Workforce, Practice and Technology	Order CQUniversity uniform from the Bookshop for the Residential School in Week 9
Week 2 - 16 Mar 2020		
Module/Topic	Chapter	Events and Submissions/Topic
The Australian healthcare system	Readings provided on Moodle: • How does Australia's Healthcare System work? • Australian Bureau of Statistics National Health Survey • Australia's Long Term National Health Plan • Submission on the 2018-2019 Federal Budget from the National Heart Foundation of Australia • Australia's National Digital Health Strategy	Consider joining the Australasian Sonographers Association (ASA).
Week 3 - 23 Mar 2020		
Module/Topic	Chapter	Events and Submissions/Topic
General diagnostic services		
Week 4 - 30 Mar 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Communication	Readings provided on Moodle: • Patient-Clinician Communication in Hospitals • The Paediatric Patient and the Geriatric Patient • Collaboration in Healthcare	
Week 5 - 06 Apr 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Understanding clinical referrals - indications and interpretation of echocardiographic and medical abbreviations and symbols	Readings provided on Moodle: Cardiac abbreviations The Third Australian Atlas of Healthcare Variation Chapter 4.4 Standard Echocardiography 18 years and over ASE Appropriate Use Criteria for Echocardiography	
Vacation Week - 13 Apr 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Week 6 - 20 Apr 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Vital signs, infection control, and handwashing	Readings provided on Moodle: • NHMRC Australian Guidelines for the Prevention and Control of Infection in Healthcare	Written Assessment Due: Week 6 Friday (24 Apr 2020) 9:00 pm AEST
Week 7 - 27 Apr 2020		
Module/Topic	Chapter	Events and Submissions/Topic

Echocardiography Part 1: principles and instrumentation	Anderson B. Echocardiography: The Normal Examination and Echocardiographic Measurements. 3rd ed. Brisbane: Echotext; 2017. Chapter 1: Basic principles of two-dimensional ultrasound imaging; p.1,9-10,15-17.	Compulsory Lab Induction Checklist Due: Week 7 Friday (1 May 2020) 5:00 pm AEST
Week 8 - 04 May 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Echocardiography Part 2: anatomical terminology, body regions, planes and performing the cardiac ultrasound examination	Anderson B. Echocardiography: The Normal Examination and Echocardiographic Measurements. 3rd ed. Brisbane: Echotext; 2017. Chapter 2: The two-dimensional echocardiographic examination; p.33-70. Readings provided on Moodle: • Guidelines for Performing a Comprehensive Transthoracic Echocardiographic Examination in Adults: Recommendations from the American Society of Echocardiography	
Week 9 - 11 May 2020		
Module/Topic	Chapter	Events and Submissions/Topic
		Residential School
Residential School		Practical Assessment Due: Week 9 Friday (15 May 2020) 5:00 pm AEST
Week 10 - 18 May 2020		
Module/Topic Safe practice	Chapter Readings provided on Moodle: Guide to Preventing Slips, Trips and Falls Caring for the Caregiver ASA and ASUM Joint Guidelines for Reducing Injuries to Sonographers/Sonologists ASA Minimising Sonographer Injuries New insights into burnout and health care: Strategies for improving civility and alleviating burnout	Events and Submissions/Topic
Week 11 - 25 May 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Legal frameworks	Readings provided on Moodle: • Legal and Ethical Aspects of Sonography • Ethical Practice in Echocardiography	
Week 12 - 01 Jun 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Revision		
Review/Exam Week - 08 Jun 2020		
Module/Topic	Chapter	Events and Submissions/Topic

To access your personal standard examination schedule:

- 1. Sign into MyCentre at http://mycentre.cqu.edu.au
- 2. Select 'My Exam Timetable'
- 3. You will then arrive at your personalised exam timetable. If any further information is required or you need assistance, please do not hesitate to contact Timetabling Enquiry on 13 27 86.

Exam Week - 15 Jun 2020

Module/Topic

Chapter

Events and Submissions/Topic

Term Specific Information

Unit Coordinator and Contact Details

Your coordinator for ECHO11003 Fundamentals of Cardiac Science is Laura Wylie. The most efficient and preferred method of contacting Laura is via the Q&A forum located on the unit Moodle site. However, if your query is of a personal nature, please contact Laura directly via email (l.wylie@cqu.edu.au) or phone (02 9324 5051). Laura's office days are Monday, Thursday and Friday.

Tutorials

Tutorials for this unit will be delivered 'live' online using ZOOM (the links required for accessing the tutorials are provided on the Moodle site). The sessions will also be recorded and made available on Moodle. The tutorials are structured and will focus on answering the weekly study questions (these can be found on Moodle under each weekly tab), and contextualisation of key concepts in preparation for related assessments.

Residential School

Your attendance at residential school is compulsory. 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 Moodle site). This documentation is required to comply with CQUniversity's Occupational Health and Safety policy. Your compulsory lab induction checklist is due on Week 7 Friday (1 May 2020) at 5:00 pm AEST.

Unit Study Commitment

As per Australian educational standards, you are expected to commit to a total of 150 hours (i.e 12.5 hours per week) of engagement towards your study for this unit. A suggestion of how you should allocate your study commitment per week is as follows:

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

Please ensure that you view the 'Welcome video' available on the Moodle site for further unit specific information.

Assessment Tasks

1 Written Assessment

Assessment Type

Written Assessment

Task Description

Knowledge of the Australian health care system and cardiology is required to practice as a Cardiac Physiologist and Echocardiographer. Health care involves the participation of patients, family, carers and a diverse team of specialised health care professionals. A collaborative interprofessional team supports exceptional and safe care, patient and staff satisfaction and engagement, and organisational efficiency and innovation. To contribute effectively within an interprofessional team, it is important to be willing to collaborate, have mutual trust and respect for your team members and communicate your knowledge, skills, and concerns with confidence. Therefore, as valued members of the interprofessional team you must be able to demonstrate knowledge and understanding of cardiovascular diseases,

common diagnostic tests, adhere to professional requirements, acknowledge patient expectations, and be aware of emerging health reform policies.

Create a Peer Information Sheet (A4 format) for the benefit of health professionals from other fields. The sheet(s) will consist of four sections with approximately 400 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 in order to develop your response. The four sections to be discussed include:

Section 1 - Introduction

- Discuss the epidemiological distribution (frequency, pattern) of cardiovascular disease globally, and in Australia
- Define risk factors that contribute to the development of cardiovascular disease
- Provide examples of the common types of cardiovascular disease in Australia
- Include an appropriate image to enhance content and understanding

Section 2 - Body

- List common diagnostic procedures that are used to investigate cardiovascular disease
- Choose ONE diagnostic test from your list and describe:
 - Why this test is performed
 - How it 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

Section 3 - Body

- Describe the ongoing professional development responsibilities of Cardiac Physiologists and/or Echocardiographers in relation to;
 - Accreditation
 - Continuing Professional Development (CPD)
- Discuss the essential elements of effective patient-clinician communication
 - Include in your answer the desired outcome
 - List <u>TWO</u> actions or strategies that may help you improve patient-clinician communication

Section 4 - Body

Research health reforms in Australia and chose <u>ONE</u> 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;
 - o a minimum of TWO benefits of this policy or strategy, and
 - o a minimum of TWO limitations or barriers to this policy or strategy
- Include an appropriate image to enhance content and understanding

Word Count

1600 words +/- 10%, word count does not include headings or references but does include explanations of tables and figures.

Referencing

Vancouver referencing style. Minimum 5 peer-reviewed journal articles (within the last 5 years) must be cited.

Format and Submission

- A4 format, orientation portrait, multiple pages allowed
- Title page
 - Student name
 - o Student number
 - Unit name
 - Assessment title
 - Word count
- Consider the use of figures, tables and/or dot points to present information clearly and concisely
- 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.
- If you do not submit an extension request or it does not demonstrate sound reasons for a late request, a penalty of five percent of the total available marks for the assessment will be deducted for each full or part calendar day

Assessment Due Date

Week 6 Friday (24 Apr 2020) 9:00 pm AEST

Return Date to Students

Week 8 Friday (8 May 2020)

Weighting

40%

Minimum mark or grade

50%

Assessment Criteria

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

- Locate and critically evaluate information
- Recognise pertinent professional information
- Describe the role of a Cardiac Physiologist / Echocardiographer in the interprofessional team
- Describe practical aspects of diagnostic cardiology

A downloadable copy of the Written Assessment task descriptor can be found **HERE**.

Referencing Style

Vancouver

Submission

Online

Submission Instructions

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.

Learning Outcomes Assessed

- Discuss the provision of cardiac assessment within the context of general diagnostic services in the Australian Health Care System
- Discuss the role and scope of practice of echocardiographers and cardiac physiologists, including professional and legal frameworks

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

You are required to complete two practical assessment tasks - a hand hygiene assessment and a scanning and interpretation assessment. You will use theoretical knowledge from lectures, tutorials as well as skills and information from 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: Scanning and Interpretation

Demonstrate introductory knowledge of cardiac ultrasound scanning, probe manipulation and scan sector orientation.

A time limit of 10 minutes will be applied to Practical Assessment Task 2: Scanning and Interpretation.

You will be notified of your campus specific assessment schedule on the day:

- 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 (15 May 2020) 5:00 pm AEST During Residential School

Return Date to Students

Week 9 Friday (15 May 2020)

Weighting

Pass/Fail

Assessment Criteria

You will be assessed using the <u>Practical Assessment Task 1 marking rubric</u> and <u>Practical Assessment Task 2 marking rubric</u> and, 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 or knowledge 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. Components are graded separately so that if one is passed and another is not, only the failed component must be repeated successfully to pass overall. You are advised to carefully review the assessment marking rubrics. No marks or feedback will be given at the time of assessment, or prior to moderation across campuses.

Only one re-attempt for either practical assessment will be permitted. Practical assessment re-sits will be held on the same day as the original attempt, following feedback provision (Friday 15 May 2020). All enrolled students must be available to act as a patient model for peer re-sits if requested by the unit coordinator.

A downloadable copy of the Practical Assessment task descriptor can be found HERE.

Referencing Style

• Vancouver

Submission

No submission method provided.

Submission Instructions

Tutor / Assessor will retain marking rubrics

Learning Outcomes Assessed

- Apply introductory-level knowledge and skill of cardiac assessment, anatomical planes and patient data using appropriate terminology
- Perform clinical tasks which demonstrate safe practice in a simulated environment.

Graduate Attributes

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

Examination

Outline

Complete an invigilated examination.

Date

During the examination period at a CQUniversity examination centre.

Weighting

60%

Length

180 minutes

Minimum mark or grade

50%

Exam Conditions

Closed Book.

Materials

Dictionary - non-electronic, concise, direct translation only (dictionary must not contain any notes or comments).

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