



# ECHO13005 Congenital Heart Disease

## Term 2 - 2020

Profile information current as at 26/04/2024 03:11 pm

All details in this unit profile for ECHO13005 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

Echocardiographers are required to perform complex assessments to aid in the diagnosis of cardiac pathology associated with congenital heart disease in both the paediatric and adult populations. In this unit you will study the link between disordered embryological development, congenital heart disease, and corrective interventional procedures. You will build upon your knowledge exploring corrective and palliative interventions and post-operative evaluation of congenital heart disease using advanced cardiovascular assessment techniques including 3-D, strain, contrast, exercise stress testing, echocardiography and trans-oesophageal echocardiography (TOE). You will apply advanced haemodynamic calculations to given clinical scenarios, guiding cardiac management. You will acquire knowledge of the principles of cardiac electrophysiology and investigation methods used in paediatric and adult congenital cardiac disease. You will apply your knowledge to simulated clinical scenarios and case studies and compare and contrast the choice of procedure within an ethical framework of best practice and patient safety.

### 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-Requisites: ECHO13006 Adult Echocardiography AND ECHO13002 Cardiac Assessment Skills 2 OR ECHO13008 Advanced Cardiac Assessment Skills

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

### Offerings For Term 2 - 2020

- Online

### Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

### Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

## Class and Assessment Overview

### Recommended Student Time Commitment

Each 6-credit 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 Quiz(zes)**

Weighting: 40%

#### 2. **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 [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 evaluations, emails, and unit-coordinator reflections

**Feedback**

The content delivery via smaller lectures by a guest lecturer (specialist in field) was well appreciated by students but could be supported with additional weekly revision materials to reinforce important concepts.

**Recommendation**

Develop and provide additional short answer questions to weekly revision materials (or weekly formative quizzes).

#### Feedback from Unit evaluations, emails, in-class, and unit-coordinator reflections

**Feedback**

Tutorials were engaging, interactive and supported learning.

**Recommendation**

Continue providing real-case scenarios in tutorials to contextualise learning and provide a systematic approach and scaffolding in through processes required to problem-solving to allow diagnosis of heart conditions.

#### Feedback from Unit evaluations, in-class, and emails

**Feedback**

Some students found it challenging to coordinate tutorial requirements alongside corequisite ECHO13007 clinical placement attendance.

**Recommendation**

Consider alternating timing of tutorials in 2020.

#### Feedback from Unit evaluations, Moodle site, and emails.

**Feedback**

Some students would prefer more individualised feedback for the Online Quiz.

**Recommendation**

Assessment task expectations to be clearly outlined in a tutorial and rolling feedback can be offered in tutorials via group discussions.

#### Feedback from Unit evaluations and emails

**Feedback**

Some students would like to be kept updated throughout the marking process.

**Recommendation**

Clearly outline to students the exact date of assessment return and communication of the date of return throughout the marking process.

## Unit Learning Outcomes

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

1. Differentiate the aetiology and related cardiac assessment data of congenital cardiac pathologies across the life span of a patient
2. Explain other diagnostic and therapeutic procedures involved in the assessment of congenital heart disease
3. Contrast echocardiographic views, cardiac assessment techniques and surgical intervention utilised in complex and congenital heart disease
4. Apply haemodynamic calculations used in complex cardiac assessment
5. Critically evaluate the treatment options and examination protocol appropriate to different types of congenital heart disease.

Linked to National and International Standards

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

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



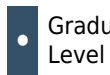
N/A  
Level



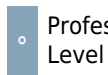
Introductory  
Level



Intermediate  
Level



Graduate  
Level



Professional  
Level



Advanced  
Level

### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes				
	1	2	3	4	5
1 - Online Quiz(zes) - 40%	•	•	•		•
2 - Online Test - 60%	•	•	•	•	•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes				
	1	2	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			•		•

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
<b>9 - Social Innovation</b>					
<b>10 - Aboriginal and Torres Strait Islander Cultures</b>					

## Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
<b>1 - Online Quiz(zes) - 40%</b>	•	•	•							
<b>2 - Online Test - 60%</b>	•	•	•							

## Textbooks and Resources

### Textbooks

ECHO13005

#### Supplementary

#### **ASE's Comprehensive Echocardiography**

Edition: Second (2016)

Authors: Lang, Goldestein, Kronzon, Khandheria, Mor-avi

Elsevier Saunders

Philadelphia , PA , USA

ISBN: 978-0-32326011-4

Binding: Other

ECHO13005

#### Supplementary

#### **A Sonographer's Guide to the Assessment of Heart Disease**

Edition: First (2014)

Authors: Bonita Anderson

MGA Graphics

Brisbane , QLD , Australia

ISBN: 9780992322205

Binding: Hardcover

#### **Additional Textbook Information**

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

[View textbooks at the CQUniversity Bookshop](#)

### IT Resources

**You will need access to the following IT resources:**

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

## Referencing Style

All submissions for this unit must use the referencing style: [Vancouver](#)  
For further information, see the Assessment Tasks.

## Teaching Contacts

**Sudeepthi Singarayar** Unit Coordinator  
[s.singarayar@cqu.edu.au](mailto:s.singarayar@cqu.edu.au)

## Schedule

### Week 1 - Introduction to Congenital Heart Disease - 13 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Congenital Heart Disease: <ul style="list-style-type: none"><li>• Foundation concepts and the segmental sequential analysis</li><li>• CHD views, vessels and terminology</li><li>• Circulation in the foetus and the first few weeks of life</li></ul>	Anderson, B. A Sonographer's Guide to the Assessment of Heart Disease. Chapter 15, Introduction to Congenital Heart Disease. Lang, R. (2016). ASE's Comprehensive Echocardiography. Philadelphia, PA: Elsevier Saunders. Section XXVI Chapters 164-169, pages 701-738.	

### Week 2 - Simple shunts - 20 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Simple shunts: <ul style="list-style-type: none"><li>• Atrial septal defects</li><li>• Ventricular septal defects</li><li>• Patent ductus arteriosus and other shunts</li></ul>	Anderson, B. A Sonographer's Guide to the Assessment of Heart Disease. Chapter 15, Introduction to Congenital Heart Disease. Lang, R. (2016). ASE's Comprehensive Echocardiography. Philadelphia, PA: Elsevier Saunders. Section XXVI Chapters 164-169, pages 701-738.	

### Week 3 - Isolated lesions - 27 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
Isolated lesions: <ul style="list-style-type: none"><li>• AVSD</li><li>• Ebstein anomaly</li><li>• Coronary arteries - Kawasaki's and ALCAPA</li></ul>	Anderson, B. A Sonographer's Guide to the Assessment of Heart Disease. Chapter 15, Introduction to Congenital Heart Disease. Lang, R. (2016). ASE's Comprehensive Echocardiography. Philadelphia, PA: Elsevier Saunders. Section XXVI Chapters 164-169, pages 701-738.	

### Week 4 - LV Inflow and outflow lesions - 03 Aug 2020

Module/Topic	Chapter	Events and Submissions/Topic
LV inflow lesions: <ul style="list-style-type: none"><li>• The left atrium - coratriatum, supra-mitral membrane, parachute MV, DOMV</li></ul> LV outflow lesions: <ul style="list-style-type: none"><li>• The left ventricle - sub-valvular and valvular lesions</li><li>• The aorta - supra-valvular AS and coarctation</li></ul>	Anderson, B. A Sonographer's Guide to the Assessment of Heart Disease. Chapter 15, Introduction to Congenital Heart Disease. Lang, R. (2016). ASE's Comprehensive Echocardiography. Philadelphia, PA: Elsevier Saunders. Section XXVI Chapters 110, 164-169, pages 466, 701-738.	

**Week 5 - RV outflow lesions - 10 Aug 2020**

Module/Topic	Chapter	Events and Submissions/Topic
RV outflow lesions: • DCRV - Double chambered right ventricle • Pulmonary stenosis: Infundibulum to branch	Anderson, B. A Sonographer's Guide to the Assessment of Heart Disease. Chapter 15, Introduction to Congenital Heart Disease.  Lang, R. (2016). ASE's Comprehensive Echocardiography. Philadelphia, PA: Elsevier Saunders. Section XXVI Chapters 164-169, pages 701-738.	

**Break Week - 17 Aug 2020**

Module/Topic	Chapter	Events and Submissions/Topic
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**Week 6 - Complex lesions 1 - 24 Aug 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Complex lesions 1: • Truncus arteriosus • Pulmonary atresia	Anderson, B. A Sonographer's Guide to the Assessment of Heart Disease. Chapter 15, Introduction to Congenital Heart Disease.  Lang, R. (2016). ASE's Comprehensive Echocardiography. Philadelphia, PA: Elsevier Saunders. Section XXVI Chapters 164-169, pages 701-738.	

**Week 7 - Complex lesions 2 - 31 Aug 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Complex lesions 2: • d-TGA • cc-TGA	Anderson, B. A Sonographer's Guide to the Assessment of Heart Disease. Chapter 15, Introduction to Congenital Heart Disease.  Lang, R. (2016). ASE's Comprehensive Echocardiography. Philadelphia, PA: Elsevier Saunders. Section XXVI Chapters 164-169, pages 701-738.	The quiz will open at 8:00 am (AEST) on Wednesday 2nd September (Week 7) and will close at 8:00 pm (AEST) Friday 4th September.

**Week 8 - Complex lesions 3 - 07 Sep 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Complex lesions 3: • Tetralogy of Fallot • Univentricular Hearts	Anderson, B. A Sonographer's Guide to the Assessment of Heart Disease. Chapter 15, Introduction to Congenital Heart Disease.  Lang, R. (2016). ASE's Comprehensive Echocardiography. Philadelphia, PA: Elsevier Saunders. Section XXVI Chapters 164-169, pages 701-738.	

**Week 9 - Venous anomalies - 14 Sep 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Venous anomalies: • Anomalies of the pulmonary veins • Anomalies of the systemic veins	Anderson, B. A Sonographer's Guide to the Assessment of Heart Disease. Chapter 15, Introduction to Congenital Heart Disease.  Lang, R. (2016). ASE's Comprehensive Echocardiography. Philadelphia, PA: Elsevier Saunders. Section XXVI Chapters 164-169, pages 701-738.	

**Week 10 - CHD outside the echo lab - 21 Sep 2020**

Module/Topic	Chapter	Events and Submissions/Topic
CHD outside the echo lab: <ul style="list-style-type: none"><li>• Congenital Services overview</li><li>• Other tests used in CHD: MVO2, CMR, CT, EPS</li><li>• Syndromes associated with CHD. Marfan's, Noonan's, Downs, Williams, Turners, Scoliosis, etc.</li></ul>	Anderson, B. A Sonographer's Guide to the Assessment of Heart Disease. Chapter 15, Introduction to Congenital Heart Disease.  Lang, R. (2016). ASE's Comprehensive Echocardiography. Philadelphia, PA: Elsevier Saunders. Section XXVI Chapters 164-169, pages 701-738.	

**Week 11 - Bringing it all together - 28 Sep 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Bringing it all together: <ul style="list-style-type: none"><li>• Clinical case studies</li><li>• Revision material</li></ul>	Anderson, B. A Sonographer's Guide to the Assessment of Heart Disease. Chapter 15, Introduction to Congenital Heart Disease.  Lang, R. (2016). ASE's Comprehensive Echocardiography. Philadelphia, PA: Elsevier Saunders. Section XXVI Chapters 164-169, pages 701-738.	

**Week 12 - Revision /Exam - 05 Oct 2020**

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"><li>• Revision</li></ul>		The online test will be open from 8:00am (AEST) on Wednesday 7th of October (week 12) and will close at 8:00pm (AEST) Friday 9th October.



## Term Specific Information

### Unit Coordinator and Contact Details

Cathy West will be presenting lectures and hosting tutorials for ECHO13005. Cathy is the Principle Echocardiographer at the renowned Royal Brompton Hospital in London, United Kingdom. Cathy began her career in Cardiac Sonography 20 years ago at the Prince Charles Hospital in Brisbane, Australia. Cathy specialises in adult congenital heart disease, and is a popular international speaker. Cathy will be covering a variety of congenital cardiac pathologies and their associated Echocardiographic assessment, as well as adding to discussions on Moodle forums.

Sudeepthi Singarayar is the Unit Coordinator, and will be monitoring posts on the 'Q&A' forum and the Moodle site. For questions of a personal nature, please do not hesitate to contact the Unit Coordinator Sudeepthi Singarayar directly by email: s.singarayar@cqu.edu.au or phone 02 9324 5036. Sudeepthi's office days are Wednesday to Friday.

Content specific questions may require a response from Cathy. Given Cathy resides in London, please note that some responses may have a time delay of several days.

### Unit 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 under the weekly tabs). The tutorials will focus on clarification of theoretical concepts and assessment requirements. Clinical case studies will also be shown, demonstrating practical application of the theoretical content.

Tutorials are designed complement the theories and principles presented in lectures. Tutorials provide an opportunity for discussion and interaction with other students and with your tutor. It is important students make the most of these interactive sessions and participate fully in order to broaden knowledge and experience with the course material.

Note: Tutorials are recorded for educational purposes. Recordings of Zoom tutorials may be uploaded and appear on YouTube, Moodle and Microsoft Teams. If you have any concerns about being recorded please turn off your webcam or audio, or both, during the session. Your participation will signify your consent to the recording and publication for educational purposes.

### Unit Study Commitment

As per Australian educational standards, there is an expectation of 150 hours of engagement required to complete learning and assessment tasks associated with this 6 credit point unit. (i.e. 12.5 hours per week) Weekly revision material will be provided. Attempting all provided revision material will help you prepare for your online test. No new lecture material will be presented during week 12 of term. This week will be used to prepare for the final assessment.

## Assessment Tasks

### 1 ONLINE QUIZ

#### Assessment Type

Online Quiz(zes)

#### Task Description

This online quiz will assess your understanding of the content presented within this unit up to and including week 6. Questions may be drawn from lectures, additional resources provided (e.g. prescribed readings) or tutorial presentations.

**The quiz can be accessed through the assessment tab on Moodle at the assigned time.**

- Questions may be multiple choice, short answer, image interpretation or essay style format.
- The online quiz will be open for 70 minutes, this includes a perusal time of 10 minutes.
- All questions are to be answered in the space provided.
- The quiz is worth 40% of your final mark.
- All questions are to be answered in the space provided.

**You are permitted ONE attempt to complete the online quiz, and once started, the quiz cannot be paused or restarted.**

It is your responsibility to ensure that you commence the online quiz before Friday 4th September 6.50 pm (AEST). Each quiz will automatically close at 8:00 pm (AEST) on Friday 4th September. You will have 70 minutes to complete the quiz. If you have not completed the test by this time, your test may be submitted incomplete or with no answers.

As the quiz is online and open book, you will find it useful if you have produced your own notes from the lectures and that you are familiar with the unit information. Questions will be drawn from a resource bank and randomised, to allow

the quiz to be different for each student. You may benefit from having a calculator available when sitting the test. This assessment is to be undertaken as an individual. As with all other university examinations, colluding with other students on non-group work tasks is considered academic misconduct, and may lead to action being taken the Deputy Dean of Learning and Teaching HMAS.

This assessment result is summative toward the final unit grade. Students are advised to refer to the 'Assessment Policy and Procedure (Higher Education Coursework) document for additional university guidelines regarding assessments.

**Number of Quizzes**

1

**Frequency of Quizzes**

Other

**Assessment Due Date**

The quiz will open at 8:00 am (AEST) on Wednesday 2nd September (Week 7) and will close at 8:00 pm (AEST) Friday 4th September. This quiz will assess the topics covered during weeks 1 to 6.

**Return Date to Students**

Individual student results and feedback will be made available once submissions have been marked and moderated. The online quiz question pool in its entirety will not be released to students.

**Weighting**

40%

**Minimum mark or grade**

50%

**Assessment Criteria**

You will be required to answer a variety of online questions.

**Question responses will be assessed according to the student's**

- use of appropriate terminology and descriptors as well as grammar and spelling.
- ability to appropriately interpret presented sonographic images and cardiac assessment data.
- ability to succinctly respond with accurate answers.

**Your score from the quiz will contribute 40% of your final grade.**

The specific date the quiz opens and closes are outlined in the due date description.

Please note that the quizzes must be completed before the due date listed. In the absence of an approved extension, there will be no opportunity to complete the task after this date, and there will be no opportunity to apply a late penalty of five percent per day. Students will receive a mark of zero (or fail) for this assessment, if you have not completed it by the scheduled date and time and do not have an extension.

**Referencing Style**

- [Vancouver](#)

**Submission**

Online

**Submission Instructions**

The online quiz(zes) will be accessible through the assessment tab on Moodle

**Learning Outcomes Assessed**

- Differentiate the aetiology and related cardiac assessment data of congenital cardiac pathologies across the life span of a patient
- Explain other diagnostic and therapeutic procedures involved in the assessment of congenital heart disease
- Contrast echocardiographic views, cardiac assessment techniques and surgical intervention utilised in complex and congenital heart disease
- Critically evaluate the treatment options and examination protocol appropriate to different types of congenital heart disease.

**Graduate Attributes**

- Communication
- Problem Solving
- Critical Thinking

## 2 Online Test

### Assessment Type

Online Test

### Task Description

The online test will assess your understanding of the content presented within this unit. Questions may be drawn from lectures, additional resources provided (e.g. prescribed readings) or tutorial presentations. Practice questions will be available on the Moodle site.

- This online test carries a 60% weighting toward final unit grade.
- Perusal time and online test duration will be 130 minutes in total.
- It is recommended that you have a calculator available when sitting the online test.
- Once started, the online test cannot be paused or restarted. Only one attempt is permitted.
- The online test will automatically close and submit completed student answers once the allocated time has elapsed.
- The duration of this test is tailored to promote recall of fact, rather than research of answers unknown.
- You will be required to answer a variety of online questions. Questions may include multiple choice, short answer, essay style or image interpretation format.

The number of marks allocated for each question will be indicated within the online test. Question marks are allocated based on the accuracy, depth and breadth of required responses.

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

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

This assessment is to be undertaken as an individual. As with all other university examination, colluding with other students on non-group work tasks is considered academic misconduct, and may lead to action being taken the Deputy Dean of Learning and Teaching HMAS.

### Assessment Due Date

The online test will be open from 8:00am (AEST) on Wednesday 7th of October (week 12) and will close at 8:00pm (AEST) Friday 9th October. This test will assess the topics covered during weeks 1 to 12.

### Return Date to Students

Individual student results and feedback will be made available once submissions have been marked and moderated. The online test question pool in its entirety will not be released to students.

### Weighting

60%

### Minimum mark or grade

50%

### Assessment Criteria

You will be required to answer a variety of online questions.

#### Question responses will be assessed according to the student's:

- use of appropriate terminology and descriptors as well as grammar and spelling.
- ability to appropriately interpret presented sonographic images and cardiac assessment data.
- ability to succinctly respond with accurate answers.

#### Your score from the online test will contribute 60% of your final grade.

The specific date the online test opens and closes are outlined in the due description.

Please note that the online test must be completed before the due date listed. In the absence of an approved extension, there will be no opportunity to complete the task after this date, and there will be no opportunity to apply a late penalty of five percent per day. Students will receive a mark of zero (or fail) for this assessment, if you have not completed it by the scheduled date and time and do not have an extension.

### Referencing Style

- [Vancouver](#)

**Submission**

Online

**Submission Instructions**

The online test will be accessible through the assessment tab on Moodle

**Learning Outcomes Assessed**

- Differentiate the aetiology and related cardiac assessment data of congenital cardiac pathologies across the life span of a patient
- Explain other diagnostic and therapeutic procedures involved in the assessment of congenital heart disease
- Contrast echocardiographic views, cardiac assessment techniques and surgical intervention utilised in complex and congenital heart disease
- Apply haemodynamic calculations used in complex cardiac assessment
- Critically evaluate the treatment options and examination protocol appropriate to different types of congenital heart disease.

**Graduate Attributes**

- Communication
- Problem Solving
- Critical Thinking

## 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