



# ECHO20005 Cardiac Clinical Unit 5

## Term 2 - 2019

Profile information current as at 19/05/2024 04:08 pm

All details in this unit profile for ECHO20005 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 graduate clinical unit builds on the skills, knowledge and attitudes developed during the Bachelor of Echocardiography and Cardiac Physiology. You will perform diagnostic cardiac ultrasound and other cardiac assessment and analyse the outcomes to meet the professions Competency Standards for the Entry-Level Cardiac Sonographer. You will evaluate clinical findings to formulate a differential diagnosis and initiate further investigation within an ethical framework of best practice and patient safety. You will apply appropriate professional and interpersonal skills to echocardiographic practice in accordance with CQUniversity postgraduate attributes and requirements for external professional accreditation. Critical appraisal of performance will enable you to advance your professional, technical and analytical skills in a work setting under qualified supervision.

#### Details

Career Level: *Postgraduate*

Unit Level: *Not Applicable*

Credit Points: 18

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.375

#### Pre-requisites or Co-requisites

Prerequisite ECHO20004 Cardiac Clinical Unit 4 ECHO20004 Cardiac Clinical Unit 4 must have been successfully completed within the last nine months. Should this time limit have elapsed the student must successfully complete one (or more) technical skill, professional behaviour and diagnostic knowledge-based assessment (s) (after completion of technical skill / knowledge revision). Details of this will be articulated in a learning contract created by the Head of Course or designate.

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 - 2019

- 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 18-credit Postgraduate unit at CQUniversity requires an overall time commitment of an average of 37.5 hours of study per week, making a total of 450 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. **Practical Assessment**

Weighting: Pass/Fail

#### 2. **Performance**

Weighting: Pass/Fail

#### 3. **Learning logs / diaries / Journal / log books**

Weighting: Pass/Fail

#### 4. **Case Study**

Weighting: Pass/Fail

#### 5. **Professional Practice Placement**

Weighting: Pass/Fail

#### 6. **Objective Structured Clinical Examinations (OSCEs)**

Weighting: Pass/Fail

### Assessment Grading

This is a pass/fail (non-graded) unit. To pass the unit, you must pass all of the individual assessment tasks shown in the table above.

## 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](#).

## Unit Learning Outcomes

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

1. Perform diagnostic echocardiographic scans to meet the Competency Standards for the Entry Level Cardiac Sonographer
2. Evaluate the outcomes of cardiac assessment, using a broad body of knowledge, to solve complex diagnostic problems
3. Behave professionally, using appropriate professional and personal skills to practice as an echocardiographer and cardiac physiologist (cardiac scientist)
4. Analyse, and critically reflect upon, clinical cases involving cardiac ultrasound and other assessment techniques
5. Attend clinical placement as per external accreditation requirements (Australian Sonographer Accreditation Registry).

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	5
1 - Practical Assessment - 0%	•	•	•		
2 - Performance - 0%			•		
3 - Learning logs / diaries / Journal / log books - 0%				•	
4 - Case Study - 0%				•	
5 - Professional Practice Placement - 0%			•		•
6 - Objective Structured Clinical Examinations (OSCEs) - 0%	•	•			

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
1 - Knowledge	○	○	○	○	
2 - Communication	○	○	○	○	○
3 - Cognitive, technical and creative skills	○	○		○	

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
4 - Research				○	
5 - Self-management	○	○	○	○	○
6 - Ethical and Professional Responsibility	○	○	○	○	○
7 - Leadership		○	○	○	
8 - 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
1 - Practical Assessment - 0%	○	○	○		○	○		
2 - Performance - 0%	○	○			○	○	○	
3 - Learning logs / diaries / Journal / log books - 0%	○				○			
4 - Case Study - 0%	○	○	○	○	○	○	○	
5 - Professional Practice Placement - 0%		○			○	○		
6 - Objective Structured Clinical Examinations (OSCEs) - 0%	○	○	○		○	○	○	

## Textbooks and Resources

### Textbooks

**There are no required textbooks.**

### IT Resources

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

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

## Referencing Style

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

## Teaching Contacts

**Kate Sturwohld** Unit Coordinator

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**Paula Boucaut** Unit Coordinator

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## Schedule

### Week 1 - 15 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
Review of left and right ventricular size and function. Diastolic function assessment.		

### Week 2 - 22 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
Review of qualitative and quantitative assessment of regurgitation.		

### Week 3 - 29 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
Review of valvular stenosis assessment. ASE update on aortic stenosis assessment.		

### Week 4 - 05 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
Review of prosthetic valves, valve repairs and haemodynamic assessment.		

### Week 5 - 12 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
Review of stress echocardiography. Role of ultrasound enhancing agents (contrast).		

### Vacation Week - 19 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
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### Week 6 - 26 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
Review of adult congenital echocardiography.		

### Week 7 - 02 Sep 2019

Module/Topic	Chapter	Events and Submissions/Topic
Review of intracardiac masses including thrombus, vegetations and tumours. Role of ultrasound enhancing agents (contrast).		

### Week 8 - 09 Sep 2019

Module/Topic	Chapter	Events and Submissions/Topic
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Review of pericardial disease including pericardial effusion, tamponade and constriction.

#### **Week 9 - 16 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Review of systemic diseases including cardiac infiltration.		

#### **Week 10 - 23 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Review of global longitudinal strain.		

#### **Week 11 - 30 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Review of 3D echocardiography.		

#### **Week 12 - 07 Oct 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Uncommon findings in echocardiography.		

#### **Review/Exam Week - 14 Oct 2019**

Module/Topic	Chapter	Events and Submissions/Topic
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#### **Exam Week - 21 Oct 2019**

Module/Topic	Chapter	Events and Submissions/Topic
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## Term Specific Information

This clinical unit starts XXX and consists of a 16 week clinical placement to achieve the minimum 640 hours (16 x 40 hours) of clinical placement. You must attend your allocated clinical placement for the entirety of each working day, including the last day of placement, unless alternative arrangements have been agreed by both the unit coordinator and clinical supervisor.

A weekly case study discussion of either transthoracic, transoesophageal, or stress echocardiography with relevant other investigations (eg. angiography) will occur. Findings, differential diagnosis, additional examinations indicated and likely clinical course will be discussed. Sources of error, technique, guidelines, protocol and examination extension will also be discussed. Specific times and meeting IDs will be posted on the unit Moodle site.

Please note that there are public holidays during your clinical placement. These can be entered as 8 hours on your clinical attendance form and do not need to be 'made up'. If you are sick, please advise your clinical supervisor and unit coordinator as these hours do need to be 'made up'. A medical certificate will be required by your unit coordinator.

Please advise the unit coordinator if you need to extend your placement end date in order to complete unit requirements.

Once students have completed the minimum number of hours they are required to continue attending placement until the placement's prescribed finish date unless an alteration to the standard placement block has been approved by the Discipline Lead and the Clinical Supervisor.

If you are experiencing difficulty meeting unit assessment requirements please contact the unit coordinator. This is a pass / fail non-graded unit which means that you must pass each individual assessment in order to pass the unit. All coursework must be submitted by the due date, as there is no opportunity to apply a 5% penalty due to the pass/fail nature of the assessment tasks. Any students who have negotiated to extend placement dates will be eligible for assessment extensions. Please confirm your extended clinical placement dates by contacting the unit coordinator via email. A student who fails any assessment in a pass/fail course or a pass/fail component of a graded unit will be deemed to have failed that unit.

## Assessment Tasks

# 1 Practical Assessment

## Assessment Type

Practical Assessment

## Task Description

In preparation for graduation, this practical assessment requires you to demonstrate the ability to competently carry out all tasks associated with a normal echocardiographic ultrasound examination, with minimal (20% or less) intervention or guidance. This is deemed equivalent to a 'competent' level of proficiency.

This task will be assessed by your clinical supervisor, or a delegate sonographer using the Practical Assessment Marking sheet. A downloadable copy of the Practical Assessment Marking Sheet can be found on the Moodle site.

Please print the Practical Assessment Marking Sheet and read it carefully so you understand the criteria against which your sonographic skill, and relevant theoretical knowledge, will be evaluated. Please provide a printed copy to your clinical supervisor at the commencement of your placement.

This assessment task must be attempted prior to the completion of the students clinical placement block. You are only permitted two attempts to complete this assessment task. It is recommended that the first attempt takes place in the 14th week of the 16-week placement.

Should you fail the first attempt at this assessment task, you will be provided with detailed feedback regarding your performance and areas requiring improvement. You will be required to develop a strategy to improve your performance. Guidance will be provided by both your clinical supervisor and the unit coordinator.

Your clinical supervisor must complete and sign the assessment form before you submit it through the assessment block in the unit Moodle site. A completed practical marking sheet with feedback, should be submitted to Moodle for each assessment attempt.

This is a PASS/FAIL assessment. Failure to successfully complete this assessment task will result in failure of the unit overall.

## Assessment Due Date

A completed Practical Assessment Marking Sheet must be submitted prior to the completion of the students 16-week clinical placement block.

## Return Date to Students

Feedback will be provided to students within two weeks of submission.

## Weighting

Pass/Fail

## Minimum mark or grade

To achieve a practical proficiency level of 'Competent', the student must attain a minimum of forty-six (46) scores of (4), and no scores of one (1).

## Assessment Criteria

The Practical Assessment Marking Sheet lists the criteria against which your sonographic skill, and relevant theoretical knowledge, will be evaluated. This sheet can be found on the unit Moodle site.

Criteria can be grouped into several main categories. These include:

- Pre-examination tasks (including patient ID checks, consent and appropriate professional communication)
- Scanning technique (including 2D, colour and spectral Doppler optimisation, and appropriate exam extension or modification)
- Measurement Technique
- Documentation (digital image storage and labelling)
- Post-examination tasks (including worksheet completion and interpretation)
- Additional tasks (incorporating ergonomics, manual handling techniques, infection control, ethical and legal requirements)

The clinical supervisor or delegate may pose questions to the student either prior, during or after scan conclusion to clarify understanding of any of the assessment criterion.

The clinical supervisor is required to evaluate multiple questions under each criterion grouping on the Practical Marking Sheet. The clinical supervisor will grade each criterion question with a score out of 4. A score of 1 indicates that the student needs constant direction and advice, whilst a score of 4 indicates largely independent practice, requiring direction or prompting only on complex or unusual cases.

## Referencing Style

- [Vancouver](#)

## Submission

Online

## Submission Instructions

Your clinical supervisor must complete and sign the assessment form before you submit it through the assessment block in the unit Moodle site.

## Learning Outcomes Assessed

- Perform diagnostic echocardiographic scans to meet the Competency Standards for the Entry Level Cardiac Sonographer
- Evaluate the outcomes of cardiac assessment, using a broad body of knowledge, to solve complex diagnostic problems
- Behave professionally, using appropriate professional and personal skills to practice as an echocardiographer and cardiac physiologist (cardiac scientist)

## Graduate Attributes

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Self-management
- Ethical and Professional Responsibility

## 2 Global Assessment of Professional Attributes (GAPA)

### Assessment Type

Performance

### Task Description

Clinical placement occurs in the professional workplace. As a clinical student you are provided access to that workplace on the condition that you demonstrate behaviours and attributes of a healthcare professional and present a positive image to the clinical facility's staff and clients.

Clinical sites mention professional behaviour, particularly team work and empathy, as paramount in their decision to employ a sonographer. This assessment considers your ability to communicate professionally with a diverse cultural audience of patients, staff and the general public, demonstrate professional respect for all, and function as a reliable, well organised member of the health team.

Your clinical supervisor, or delegate, will be working in the echocardiography lab with you, directly observing your day-to-day performance. These observations and collected feedback relate to your demonstrated knowledge, skills and behaviours over a span of time, not limited to a particular scan type or patient case. The observations and feedback are then used to complete the Global Assessment of Professional Attributes (GAPA) form provided.

There are three main sections to the GAPA form:

Section 1: Initiative and Communication

Section 2: Responsibility and Demeanour

Section 3: Overall Technical Knowledge and Skill

A downloadable copy of the GAPA form can be found on the unit Moodle site.

Students commence each clinical practicum unit having successfully demonstrated the '**behavioural attributes of overall technical knowledge and skill**' consistent with the competency level of the previous requisite unit. The GAPA 'Overall technical knowledge and skill behavioural attributes' critiques need to be evaluated within the context of the practical competency level that the students must attain **at the end** of each clinical practicum. These applicable competency levels are defined within the practical assessment marking tool associated with each clinical placement (ie. ASAR described competency level of 'Beginner - ECHO13007', 'Advanced Beginner - ECHO 20004', and finally 'Competent - ECHO20005').

**Occasionally student behaviour is beyond acceptable risk to clinical sites. Clinical supervisors contact CQUniversity academics immediately when this occurs. A GAPA assessment is requested at this time (which could be at any time during your placement). If the outcome of this GAPA is unsatisfactory, and/or the site feedback indicates that they can no longer host you due to the risk incurred, then this one GAPA alone, or site refusal to host, will constitute a fail of ECHO20005. Where such risk exists your placement will terminate immediately.**

**It is difficult to place such students in the clinical environment again. Your continued progress within the Echocardiography course may be at risk.**

### Assessment Due Date

First GAPA assessment is due at the end of week 8 of placement. The second GAPA assessment is due at the end of week 16 of placement.



## Return Date to Students

Interim feedback will be provided to students within two weeks of submission of the first GAPA. Students identified as 'at risk' of failing will receive prioritised feedback.

### Weighting

Pass/Fail

### Minimum mark or grade

The final GAPA at the completion of this placement, is a PASS/FAIL assessment item. To PASS, the student must receive an overall score of 39 marks or more, from a potential of 56 marks, and additionally is not permitted any scores of 0.

### Assessment Criteria

In each section of the GAPA, there are multiple observable behaviours that a student is required to demonstrate throughout placement.

The GAPA is used to assess behavioural attributes including:

- Initiative and communication
- Responsibility and demeanour
- Technical knowledge and skill application

Your assessor will score your clinical performance based on how frequently and to what extent you demonstrate each of the listed behaviours. The clinical supervisor will allocate a score of 0, 1 or 2.

- A score of 0 indicates that the student does not demonstrate this behavioural attribute, or demonstrates it in an unacceptable manner.
- A score of 1 indicates that the student demonstrates this behaviour attribute, but needs some improvement.
- A score of 2 indicates that the student consistently demonstrates this behaviour attribute (>70% of the time) to a high level.

Your assessor is also encouraged to provide comments to expand on the scoring feedback.

This assessment occurs twice during the placement. The first occurs at the mid-placement point, at the end of Week 8. If minimum scores in the mid-placement GAPA are not met, you will be regarded as a **'Student at Risk' of failing the clinical unit overall.**

- The unit coordinator will contact you to advise you of the risk of failing ECHO20005 and provide formative feedback via email. You must respond to this email to show you understand the implications of this information.
- You will be required to reflect on your performance and the feedback provided, and to develop an action plan to address any areas of performance that are not yet at the target level for this placement, and use the remaining weeks to achieve those targets.
- Review of your progress will be completed a short time after the mid placement GAPA, at any time as requested by your supervisor or unit coordinator.

**Note: If behavioural attributes within any section of the GAPA are deemed a 'patient safety risk', student placement may be cancelled after just one GAPA, prior to completion of the allocated clinical placement block.**

The second assessment occurs during week 16 of your clinical placement. The end-of-placement GAPA assessment is summative. For any behaviour that you score well on at the mid-placement assessment, it is expected that you will continue to meet that level of performance or surpass it for the rest of the placement.

Unsatisfactory scores obtained at the second GAPA attempt, will result in a FAIL grade for ECHO20005 overall.

**Failure of this clinical unit will require you to meet with the Head of Course to discuss the instigation of an individual learning contract for you with a view to remedying your scanning skills, technical issues and/or behavioural issues. The learning contract will detail learning objectives, available learning resources, strategies and methods which will be used to assess your progress. This will likely involve scanning skills labs for tuition and assessment on a regular basis.**

### Referencing Style

- [Vancouver](#)

### Submission

Online

### Submission Instructions

Two separate online submissions of the completed GAPA form are required, one at the end of week 8 and the other at the end of week 16 of your clinical placement.

### Learning Outcomes Assessed

- Behave professionally, using appropriate professional and personal skills to practice as an echocardiographer and

cardiac physiologist (cardiac scientist)

### **Graduate Attributes**

- Knowledge
- Communication
- Self-management
- Ethical and Professional Responsibility
- Leadership

## **3 Clinical Case Log**

### **Assessment Type**

Learning logs / diaries / Journal / log books

### **Task Description**

The 'Clinical Case Log Book' is a document designed to track clinical experience. This log book documents all observed, partially or fully completed echocardiography cases that a student is exposed during clinical placement.

The clinical case log will also incorporate details of case exposure obtained during any hours of attendance submitted from 'outside of clinical placement'.

### **Maintenance of a clinical case logbook helps to ensure that:**

- a) an acceptable volume of clinical work is achieved
- b) exposure to a reasonable case variety is achieved, and
- c) key practical skills are developing.

### **The 'Clinical Case Logbook' incorporates the following data:**

1. Cover page(s) which present two tables summing the weekly cumulative case volume under descriptive headings. Summative tally is based on the actual scan findings, NOT the referral indications.
2. The date of each examination.
3. Allocation of a unique identifier for each patient to ensure anonymity.
4. Referral indications
5. Type of echocardiogram performed (i.e. Adult, Paediatric, Stress/Dobutamine, TOE)
6. Student level of scan participation (Observed, partially, or fully completed examination)
7. Case Findings

The Clinical Case Logbook should be kept in excel format and submitted electronically at the end of clinical placement. The Clinical Case Log Book entries should be sighted weekly by the supervising ASAR accredited sonographer or appropriately qualified medical practitioner.

### **Assessment Due Date**

The first Monday following the completion of your Clinical Placement. Any students whose clinical placement dates have been negotiated to extend beyond these due dates will be eligible to apply for an extension to the unit coordinator.

### **Return Date to Students**

Feedback will be provided to you within two weeks of submission.

### **Weighting**

Pass/Fail

### **Minimum mark or grade**

PASS/FAIL. A student must partially or fully complete a minimum of 320 echocardiographic scans to pass this clinical unit.

### **Assessment Criteria**

The clinical logbook serves as a record of the depth and breadth of experience you attained during the placement. It demonstrates the degree of progression of your skill development within and across examination types. You should analyse this record at regular intervals to assist in the formulation of learning goals that will support your achievement of the unit outcomes.

During this clinical placement, a student must partially or fully complete a minimum of 320 echocardiograms.

### **Referencing Style**

- [Vancouver](#)

### **Submission**

Online

### **Submission Instructions**

Please note: The designated clinical supervisor must verify log book is an accurate representation of the

echocardiographic cases that the student has participated in during placement. A copy of this verification needs to be submitted with the electronic clinical log book.

### **Learning Outcomes Assessed**

- Analyse, and critically reflect upon, clinical cases involving cardiac ultrasound and other assessment techniques

### **Graduate Attributes**

- Knowledge
- Self-management

## **4 Case Studies**

### **Assessment Type**

Case Study

### **Task Description**

Students will be required to submit 4 case studies over the duration of their 16 week clinical placement. Each echocardiographic study must have been partially or fully completed by the submitting student themselves. Submissions can be staggered and completed in any order, but at least two cases must be submitted by the end of week 8, or mid clinical placement.

One case study should be submitted from each of the following categories:

1. Ventricular function assessment including comprehensive systolic and diastolic evaluation
2. Aortic stenosis, mitral stenosis or prosthetic valvular replacement assessment, incorporating application of PEDOF probe
3. Valvular regurgitation assessment of at least moderate severity
4. Congenital anomaly

NB. Students who do not encounter a congenital echocardiographic case within their facility by week 10 of placement, will be provided with a case for evaluation by the unit coordinator.

The purpose of these case study submissions is to:

- Provide the unit coordinator with an opportunity to critically evaluate and moderate student technical performance on cases that they have performed as part of their clinical workload
- Facilitate the continued development of student clinical reasoning and to ensure exposure to a variety of clinical cases
- Encourage student reflection and self improvement, of both technical and research skills, pathology knowledge and assessment strategies

Each case study should include:

- identification of the clinical indications for the examination performed
- identification of expected echo findings based on clinical indications
- identification of any patient care considerations
- a brief discussion of the relevance of any previous imaging or medical tests which may be accessible
- identification of variations in scanning protocol which were necessitated and why
- identification of any scan or measurement limitations encountered
- a description of findings and categorisation of lesion severity against established guidelines
- a brief discussion of the case anomaly, pathophysiology and etiology
- a discussion of additional investigations indicated and how this could influence management (eg. transoesophageal echocardiography, left or right heart catheterisation/angiography, MRI, CTCA), likely disease progression and patient management

The anonymised provisional or final echocardiographic report should be included as an appendix to the case study.

Any supervisor assistance must be clearly identified within the case study report.

The echocardiographic cases presented must be accompanied by the submission of de-identified DICOM images. The DICOM images can be submitted on a USB to the unit coordinator. A mail address will be made available on the unit Moodle site. Alternatively the files can be uploaded and shared via a google drive folder link. Time and date, as well as technical information must be retained on the images.

### **Assessment Due Date**

Two case studies must be submitted by week 8, and the final two cases studies must be submitted by Friday 5pm, week 16 of the Clinical Placement

### **Return Date to Students**

Feedback will be provided within two weeks of submission.

### **Weighting**

Pass/Fail

### **Minimum mark or grade**

This is a PASS/FAIL assessment. A PASS is defined as achieving 65%.

### **Assessment Criteria**

Case study submissions will be critiqued using a marking rubric available on the unit Moodle site. This rubric will evaluate:

- the diagnostic quality of the examination performed, in particular, the scan technique and protocol adopted by the student
- image optimisation and image selection representative of pathology
- measurement technique
- the student's self critique of examination quality
- discussion of findings and anomaly presented with reference to relevant literature and use of appropriate references
- appropriate use of terminology, and presentation style consistent with that of a scientific discussion

Case study should be concise and succinctly presented.

Word count limit 1200-1500 words.

This is a PASS/FAIL submission. A PASS will be awarded if:

- conclusions drawn are appropriate and consistent with images and information acquired
- student self critique is appropriate
- information presented within the case study is consistent with current guidelines and is appropriately referenced
- presentation standard adopts an appropriate scientific narrative

Submissions not up to standard, will be returned to the student with appropriate feedback. A re-submission will be required within one week of receiving feedback.

Only one re-submission opportunity for each case study submission will be provided.

### **Referencing Style**

- [Vancouver](#)

### **Submission**

Online

### **Submission Instructions**

Submission is to be uploaded to the Moodle site as a word document (doc., docx., not write protected) The submission will be screened for plagiarism using Turnitin.

### **Learning Outcomes Assessed**

- Analyse, and critically reflect upon, clinical cases involving cardiac ultrasound and other assessment techniques

### **Graduate Attributes**

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research
- Self-management
- Ethical and Professional Responsibility
- Leadership

## **5 Hours of Attendance Log Book**

### **Assessment Type**

Professional Practice Placement

### **Task Description**

To pass this assessment you must achieve a minimum of 640 hours (16 X 40 hours) of clinical attendance. Any days away from your clinical site must be documented.

Over the course of your 16 week clinical placement all hours worked must be entered into the clinical attendance form. This form must be signed by your clinical supervisor, or a sonographer delegated this task by your clinical supervisor.

The clinical attendance form is available in the assessment block in the unit Moodle site. Please print this form and read

it carefully so you understand the criteria against which your clinical attendance will be evaluated. If you are away from your clinical institution during placement work hours, you **MUST** supply a verifiable supporting document indicating why you have not attended. Both your clinical supervisor and the unit coordinator **MUST** be informed of any absences from your clinical placement. Any absence for part, or all of, a working day must be made up after, or during (e.g Saturday /evenings if available), the clinical placement.

You can supplement any deficit in log book hours with hours accrued from 'outside clinical placement'. You can submit the 'outside clinical placement' attendance form dated between the end of year 4 ECHO20004 clinical placement and the start of year 4 ECHO20005 (second) placement.

Details of this are in the 'Outside Placement Hours' information tab on the unit Moodle site.

**Please note: The Logbook must be verified (signed) by an ASAR accredited sonographer or appropriately qualified medical practitioner.**

Details of either your insurance, or employment, must be entered in the Outside Clinical Placement Attendance form on your moodle site.

### **Assessment Due Date**

Your attendance sheets are due on the Monday following your final week of placement.

### **Return Date to Students**

Feedback will be given approximately within 2 weeks of submission.

### **Weighting**

Pass/Fail

### **Minimum mark or grade**

This is a PASS/FAIL assessment. A PASS will be awarded provided 640 hours of clinical attendance have been achieved.

### **Assessment Criteria**

In order to achieve an overall grade of 'Pass' in this assessment task, you must:

- meet the minimum number of hours required on the attendance form,
- accurately record your studies in the clinical case log,
- ensure the documentation of each assessment is complete, and
- upload each completed assessment for into the unit Moodle site by the due date.

### **Referencing Style**

- [Vancouver](#)

### **Submission**

Online

### **Submission Instructions**

Your Clinical Attendance Forms must be submitted by the Monday following end of Clinical Placement via the Moodle site.

### **Learning Outcomes Assessed**

- Behave professionally, using appropriate professional and personal skills to practice as an echocardiographer and cardiac physiologist (cardiac scientist)
- Attend clinical placement as per external accreditation requirements (Australian Sonographer Accreditation Registry).

### **Graduate Attributes**

- Communication
- Self-management
- Ethical and Professional Responsibility

## **6 Objective structured clinical examination (OSCE)**

### **Assessment Type**

Objective Structured Clinical Examinations (OSCEs)

### **Task Description**

The objective of this assessment task is to moderate the clinical competence of all students, to ensure safe practice upon graduation. This is the University's duty of care as required by the Australian Sonography Accreditation Registry. The application of Echocardiography and cardiac physiology knowledge and skills at a graduate level will be assessed using an OSCE format - 'Objective Structured Clinical Examination'.

The OSCE will consist of two components (A) image interpretation; and (B) echocardiographic scanning. Together these tasks will simulate clinical practice.

Each assessment component will require the student to perform certain clinical tasks. The responses will be observed and documented. Performance will be evaluated using an Assessment of Readiness for Professional Practice (ARPP) tool. The ARPP will detail a standardized marking critique for both component (A) and (B). The ARPP tool is available for download on the unit Moodle site.

#### **Component A:**

The image interpretation component will consist of four cases displayed in a PowerPoint format on a computer.

The echocardiographic pathologies presented during this assessment, are covered in detail within the CV69 Bachelor of Echocardiography and cardiac physiology / Graduate diploma of Echocardiography curriculum, and will fall under the following headings:

1. Ventricular function
2. Valvular disease
3. Congenital Heart disease
4. Other cardiac findings (intra-cardiac or extra-cardiac)

- Component (A) has a total possible mark allocation of 100 marks. Each case will be weighted equally, with a maximum of 25 marks available per case.
- Each case will be introduced with a brief patient history and/or referral indications. An examiner will then present a Power point presentation and ask questions corresponding to appropriate slides.
- Students will be given the opportunity to go back to questions regarding particular slides, if time permits during the assessment but once the time is up nothing new can be added to your responses. A maximum of 10 minutes discussion time will be allocated to each case study.

#### **Component B:**

The echocardiographic scanning component will consist of a 45-minute scanning session. During this session, students will be asked to perform components of a transthoracic examination on a provided patient model.

Results including feedback and a copy of the completed ARPP tool, will be provided to students following cross campus moderation of interim grades.

This is a PASS/FAIL assessment task.

#### **Assessment Due Date**

OSCE assessment will be schedule in the weeks following conclusion of clinical placement block. Date will be published on the unit Moodle site.

#### **Return Date to Students**

Results and feedback will be made available after moderation, within two weeks of OSCE completion.

#### **Weighting**

Pass/Fail

#### **Minimum mark or grade**

As described under assessment criteria.

#### **Assessment Criteria**

**Component A of this assessment task will critique the student's ability to demonstrate their Echocardiographic and cardiac physiology knowledge through discussion of topics including:**

- Normal and abnormal sonographic appearances
- 2D, colour and Doppler interpretation, including hemodynamic evaluation and severity classification
- Imaging and measurement optimisation, artefacts and caveats
- Pathophysiology of disease process
- Differential diagnoses
- Relevance of findings to referral indications and prognostic significance
- Use of appropriate sonographic terminology

Student responses will be compared against model answers, and marks will be awarded according to the provided ARPP tool. To achieve competency in component (A) students must:

- Pass each of the four (4) cases, by achieving a minimum grade of 50% for each individual case - (> 12.5/25 marks)
- Achieve a minimum overall grade of 60% for component (A) - (> 60/100 marks)

**Component B of this assessment task will critique the student's ability to demonstrate competent Echocardiographic scanning skills including:**

- Image quality comparable to that obtained by an experienced cardiac sonographer on the same day
- Accurate measurement acquisition
- Appropriate exam extension

To achieve competency in component (B), students must:

- Achieve 'Competent' against all criteria detailed on the ARPP tool

**To pass the OSCE assessment overall, a student must demonstrate competency for both component (A) and (B).**

**Only ONE opportunity for RESIT will be provided for either component.**

### **Referencing Style**

- [Vancouver](#)

### **Submission**

Offline

### **Submission Instructions**

Examiner will complete ARRP tool for component A and B of assessment

### **Learning Outcomes Assessed**

- Perform diagnostic echocardiographic scans to meet the Competency Standards for the Entry Level Cardiac Sonographer
- Evaluate the outcomes of cardiac assessment, using a broad body of knowledge, to solve complex diagnostic problems

### **Graduate Attributes**

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Self-management
- Ethical and Professional Responsibility
- Leadership

## 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