



# ECHO20005 Cardiac Clinical Unit 5

## Term 2 - 2020

Profile information current as at 07/05/2024 12:53 am

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 - 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).

#### 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](#).

## 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

**Feedback**

Teaching resources supported development of knowledge and skills in preparation for graduation.

**Recommendation**

Teaching resources will continue to be developed to ensure maintenance of clinical currency.

#### Feedback from Unit evaluations

**Feedback**

Tutorials were interactive and applicable to students' placement and for the preparation of the OSCEs.

**Recommendation**

Tutorials will continue to be interactive to promote discussion and explore topics in detail in preparation for OSCEs.

#### Feedback from Unit evaluations

**Feedback**

Feedback from case studies was beneficial to improve future studies and scans.

**Recommendation**

Constructive feedback of imaging technique, methodology and appropriate protocol extension will continue.

#### Feedback from Unit evaluations, email

**Feedback**

Students reported that case study submissions were onerous to complete, yet beneficial to development of clinical reasoning.

**Recommendation**

Clinical reasoning will continue to be a major focus of case study marking rubrics. Case study load is under revision for future delivery

## 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



N/A Level



Introductory Level



Intermediate Level



Graduate Level



Professional Level



Advanced Level



Assessment Tasks	Graduate Attributes							
	1	2	3	4	5	6	7	8
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  
[k.sturwohld@cqu.edu.au](mailto:k.sturwohld@cqu.edu.au)

## Schedule

### Week 1 - 29 Jun 2020

#### Module/Topic

#### Chapter

#### Events and Submissions/Topic

Clinical placement commences 29/6/2020 and concludes 16/10/2020 or as otherwise agreed with the Unit Coordinator/Head of Course.

This clinical unit occurs outside of standard university term dates. Please refer to the unit Moodle site for assessment details and relevant due dates.  
This unit consists of a sixteen (16) week clinical placement, to a minimum of 640 hours (16 x 40 hours).

### Week 2 - 06 Jul 2020

#### Module/Topic

#### Chapter

#### Events and Submissions/Topic

Left and right ventricular size and systolic function. Diastolic function.

### Week 3 - 13 Jul 2020

#### Module/Topic

#### Chapter

#### Events and Submissions/Topic

Cardiomyopathy.

**Clinical Attendance Form 1** due by Monday at 5pm AEST.

**Week 4 - 20 Jul 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Stress echocardiography. Ischaemic heart disease. Complications of myocardial infarction.		

**Week 5 - 27 Jul 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Qualitative and quantitative assessment of regurgitation.		<b>Clinical Attendance Form 2</b> due by Monday at 5pm AEST.

**Week 6 - 03 Aug 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Valve stenosis.		

**Week 7 - 10 Aug 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Prosthetic valve assessment.		<b>Clinical Attendance Form 3</b> due by Monday at 5pm AEST.

**Week 8 - 17 Aug 2020**

Module/Topic	Chapter	Events and Submissions/Topic
		<b>Case study 1</b> due by Friday at 5pm AEST. <b>Mid clinical placement GAPA</b> due by Monday at 5pm AEST.

**Week 9 - 24 Aug 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Cardiac tamponade, constrictive pericarditis.		<b>Clinical Attendance Form 4</b> due by Monday at 5pm AEST. <b>Mid-Placement Clinical Case Log</b> due by Monday at 5pm AEST.

**Week 10 - 31 Aug 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Adult congenital heart disease.		

**Week 11 - 07 Sep 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Endocarditis, cardiac masses.		<b>Clinical Attendance Form 5</b> due by Monday at 5pm AEST.

**Week 12 - 14 Sep 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Systemic diseases with cardiac manifestations.		<b>Case study 2</b> due Friday at 5pm AEST.

**Week 13 - 21 Sep 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Rare findings.		<b>Clinical Attendance Form 6</b> due by Monday at 5pm AEST.

**Week 14 - 28 Sep 2020**

Module/Topic	Chapter	Events and Submissions/Topic
		<b>Practical Assessment:</b> It is recommended the Practical Assessment is performed in week 14.

**Week 15 - 05 Oct 2020**

Module/Topic	Chapter	Events and Submissions/Topic

**Clinical Attendance Form 7** due by Monday at 5pm AEST.

**Week 16 - 12 Oct 2020**

Module/Topic	Chapter	Events and Submissions/Topic
		<b>Final clinical placement GAPA to be completed.</b> <b>Practical assessment resit to be completed (if necessary).</b>

**Assessments - 19 Oct 2020**

Module/Topic	Chapter	Events and Submissions/Topic
		<b>NOTE: Assessment due dates correspond with the Monday following the last week of clinical placement.</b> Due dates will differ depending on individual start date. In most instances the following the final week assessments are due on Monday 19th October 2020 by 5pm AEST: <ul style="list-style-type: none"><li>• Practical skills assessment</li><li>• Final GAPA assessment</li><li>• Clinical attendance form 8</li><li>• Clinical Case Log Book</li></ul> <b>OSCE assessment will be scheduled in the weeks following conclusion of clinical placement block. Dates will be published on the unit Moodle site.</b>

## Term Specific Information

The Unit Coordinator for ECHO20005 is Kate Sturwohld. The preferred method for contacting Kate is via the Q&A forum located on the Moodle site for content related questions. If the query is of a personal nature, please email k.sturwohld@cqu.edu.au, or phone (02) 9324 5071. Kate's work days are: Wednesday, Thursday and Friday and she is based at the Sydney Campus.

This clinical unit starts on the 29th of June 2020 (two weeks before week 1 of term 2) 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.

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 Unit Coordinator, Head of Course and the Clinical Supervisor.

During academic term 2 weekly tutorial / case study discussion of either transthoracic, transoesophageal, or stress echocardiography 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.

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. Any students who have negotiated to extend placement dates will be eligible for assessment extensions.

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 students 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 the 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. Students are required to provide a printed copy of this marking sheet to their Clinical Supervisor at the commencement of placement.

#### Students are encouraged to:

- Read the marking sheet carefully so you understand the criteria against which sonographic skills, and relevant theoretical knowledge, will be evaluated
- Discuss the best time to complete this assessment with the clinical supervisor, to ensure minimal departmental disruption and sufficient time for task completion
- Seek detailed feedback from the clinical supervisor post assessment to enable identification of areas requiring improvement.

#### Please note the following details:

- In case of receiving a fail only **one re-attempt will be permitted**



- This assessment task must be completed prior to the completion of the students clinical placement block
- It is recommended that the first attempt takes place on or before the 14th week of placement thus allowing sufficient time for improvement before a second attempt
- Should the student fail the first attempt at this assessment task, they will be provided with detailed feedback regarding performance and areas requiring improvement.

The clinical supervisor must complete and sign the Practical Assessment Marking Sheet before submission through the assessment block in the unit Moodle site. A completed Practical Assessment Marking Sheet, with feedback, should be submitted to Moodle for each assessment attempt. **The submission must be accompanied by de-identified DICOM images of the echocardiogram performed.** All clinical information must be de-identified to protect patient privacy and confidentiality. Maintenance of patient confidentiality must be adhered throughout both practical and written components of the case study. Relevant details for submission of DICOM images can be located on the Moodle site. If all attempts to de-identify the echocardiography images have failed, the student must request permission from the patient to provide their images to CQUniversity for educational purposes. The patient must provide written consent by completing the form provided on the unit Moodle site.

**Failure to successfully complete this assessment task will result in failure of the unit overall.**

#### **Assessment Due Date**

Monday immediately following completion of clinical placement - usually 5pm AEST Monday 19th October 2020.

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

Feedback will be provided to students who have failed to achieve 'competence' within 5 business days 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 four (4), and no scores of one (1). The final PASS/FAIL grade for this assessment will be at the discretion of the unit coordinator.

#### **Assessment Criteria**

The Practical Assessment Marking Sheet lists the criteria against which the students sonographic skill, and relevant theoretical knowledge, will be evaluated. This sheet can be found on the unit Moodle site. During this clinical placement, students will be scanning real-life patients and will be assessed to a 'Competent' level of proficiency - requiring minimal direction.

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 extensions 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

Students are to submit their practical assessment online via Moodle. The Clinical Supervisor must complete and sign the assessment form before submission. De-identified DICOM images uploaded to a Google drive folder and shared with unit coordinator.

### 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. Clinical students are provided access to that workplace on the condition that they 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 the students 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.

The clinical supervisor, or delegate, will be working in the echocardiography lab with the student, directly observing your day-to-day performance. These observations and collected feedback relate to student's demonstration of 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. In each section there are multiple observable behaviours that the student is required to demonstrate throughout the placement. The assessor will score the performance of the student based on how frequently, and to what extent, each of the listed behaviours are demonstrated. The assessor is also encouraged to provide comments to expand on the scoring feedback. **This assessment is performed TWICE during the placement - at the midpoint (week 8) and at the completion (week 16).**

The student is expected to use feedback provided after the first GAPA to:

- Reflect on performance
- Develop and action plan to address any areas of performance that are not yet at the target level for this placement.

**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 placement). If the outcome of this GAPA is FAIL grade, and/or the site feedback indicates that they can no longer host the student 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 the placement**

**will terminated immediately.**

### **Assessment Due Date**

First GAPA occurs in week 8 of clinical placement and is due Monday Week 9 of clinical placement - usually 5pm AEST Monday 24th August 2020. The second GAPA assessment occurs toward the end of week 16 and is due at the end of clinical placement - usually 5pm AEST Monday 19th October 2020.

### **Return Date to Students**

Feedback will be provided to students identified at risk of failing on the mid term GAPA within 5 business days of GAPA submission.

### **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.

The assessor will score your clinical performance based on how frequently and to what extent the student demonstrates 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.

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

This assessment occurs twice during the placement. **The first GAPA occurs mid-placement, during Week 8.**

**If minimum scores in the mid-placement GAPA are not met, the student will be regarded as a 'Student at Risk' of failing the clinical unit overall.**

- The unit coordinator will contact the student to advise the student of the risk of failing ECHO20005 and provide formative feedback via email. The student must respond to this email to show you understand the implications of this information.
- The student will be required to reflect on 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 the students progress will be completed a short time after the mid placement GAPA, at any time as requested by the clinical supervisor or unit coordinator.

**The second assessment occurs during week 16 of your clinical placement.** The end-of-placement GAPA assessment is summative. For any behaviour that a student scores well on at the mid-placement assessment, it is expected that the student 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 the student to meet with the Head of Course to discuss the instigation of an individual learning contract with a view to remedying 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 progress. This will likely involve scanning skills labs for tuition and assessment on a regular basis.

This is a PASS/FAIL assessment and must be submitted by the due date.

### **Referencing Style**

- [Vancouver](#)

### **Submission**

Online

### **Submission Instructions**

Two separate online submissions of the completed form via Moodle at the end of week 8 and week 16 of clinical placement (or the Monday immediately following).

### **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 to 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:**

- an acceptable volume of clinical work is achieved
- exposure to a reasonable case variety is achieved
- 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 mid-placement and at the end of clinical placement. The Clinical Case Log Book Cover Page must be signed by the supervising ASAR accredited sonographer or appropriately qualified medical practitioner.

### **Assessment Due Date**

Monday of week 9 and Monday following the completion of clinical placement - usually 5pm AEST Monday 24th August and 5pm AEST Monday 19th October 2020.

## Return Date to Students

Individual student feedback will be provided only if assessment criteria deficits are identified.

### Weighting

Pass/Fail

### Minimum mark or grade

PASS/FAIL. Students should aim to partially or fully complete a minimum of 320 echocardiographic scans.

### Assessment Criteria

The clinical logbook serves as a record of the depth and breadth of experience attained during the placement. It demonstrates the degree of progression of the students skill development within and across examination types. It is recommended that students should analyse this record at regular intervals to assist in the formulation of learning goals that will support achievement of the unit outcomes. Students are advised to ensure they are gaining experience under each of the different categories.

**It is recommended that students partially or fully complete a minimum of 320 echocardiograms (average 4 per day). Students should regularly assess case log progress and if are unable to achieve the minimum number of scans should contact the unit coordinator.**

In order to achieve an overall grade of PASS in this assessment task, students must:

- Accurately record all studies into the Clinical Case Log Book
- Logbook Cover Page must be signed by the clinical supervisor or a delegate of the clinical supervisor
- Ensure the documentation is complete
- Submit the requested documentation via the unit Moodle site by the published due dates.

The mid term submission must be complete up to the end of week 8 including the Clinical Case Log Book and Logbook Cover Page. The final submission must include the entire clinical placement including the Clinical Case Log Book and Logbook Cover Page.

## Referencing Style

- [Vancouver](#)

## Submission

Online

### Submission Instructions

Submitted online via Moodle.

## 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 two (2) case studies during this 16 week clinical placement. Each echocardiographic study **must have been completed by the submitting student themselves during this clinical placement** (a limited number of labelled images may be included by clinical supervisor).

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

1. **Aortic stenosis, mitral stenosis or prosthetic valvular replacement assessment, incorporating application of PEDOF probe.**
2. **Congenital anomaly.**

Students who do not encounter a suitable case in clinical practice should contact 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 must include the following:

- Clinical indications for the exam
- Details of expected findings based on clinical indications
- Patient care considerations
- Brief discussion of any previous imaging or medical testing available
- Variations in scanning protocol used
- Identification of study limitations (imaging or measuring)
- Detailed description of study findings and pathology identified, including grading of severity in accordance with ASE guidelines
- Discussion of aetiology and pathophysiology
- Discussion of any appropriate additional investigations indicated (eg. transoesophageal echocardiography, left or right heart catheterisation/angiography, MRI, CTCA) including how this could influence patient management
- Brief explanation of likely or expected disease progression and patient management (including any follow up if available).

### **Image Submission**

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.** All clinical information must be de-identified to protect patient privacy and confidentiality. Maintenance of patient confidentiality must be adhered throughout both practical and written components of the case study. Relevant details for submission of DICOM images can be located on the Moodle site. If all attempts to de-identify the echocardiography images have failed, the student must request permission from the patient to provide their images to CQUniversity for educational purposes. The patient must provide written consent by completing the form provided on the unit Moodle site. The patient consent form must be submitted with the case study.

The DICOM images must be submitted to the unit coordinator. Upload and share a google drive folder link. Time and date, as well as technical information should be retained on the images.

### **Word count:**

1200-1500 words. Word count does not include headings or references, but does include diagram explanation and labelling.

### **Referencing:**

Vancouver. Minimum of 5 peer reviewed journal articles/relevant text books must be cited. Literature titles must be current (< 5 years of age), except for seminal works.

### **Assessment Due Date**

First case study due by Friday of week 8 of clinical placement - usually 5pm AEST Friday 21st August 2020. Second case study due Friday of week 12 of clinical placement - usually 5pm AEST Friday 18th September 2020.

### **Return Date to Students**

Feedback will be provided within 2 week of submission.

### **Weighting**

Pass/Fail

### **Minimum mark or grade**

Imaging component PASS/FAIL. Minimum pass mark for written component is 65%. You must pass both imaging and written components to achieve a pass overall for this assessment task. You must pass this assessment to pass the unit.

### **Assessment Criteria**

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

The rubric will assess the following items:

- Diagnostic quality of the examination performed
- Scan technique and protocol adopted by student
- Image optimisation and appropriate image selection to assess presenting pathology
- Measurement technique
- Self critique of examination by student
- Discussion of findings and pathology presented with reference to relevant literature and current guidelines
- Appropriate use of terminology throughout
- Presentation style consistent with scientific discussion.

The case study must be referenced using Vancouver referencing style. Support material for Vancouver Referencing System is available on the Moodle site.

Students must pass this assessment to pass the course:

- **The pass mark for the written component of the case study is 65%.**
- **The imaging component of the case study is a PASS/FAIL submission. Case studies submitted without accompanying DICOM images will be awarded a FAIL grade.**

**Any submissions made after the due date will be subject to a late submission penalty of 5% per day (or part thereof), this penalty will be applied to the written component.**

Case studies that do not achieve a pass grade will be returned to the student with appropriate feedback. Students are permitted one re-submission opportunity for each case study (imaging component and/or written component as required). Any re-submission attempt is required within two (2) weeks of receiving feedback. Should the imaging component need to be re-submitted the second submission does not need to be from the same patient.

### **Referencing Style**

- [Vancouver](#)

### **Submission**

Online

### **Submission Instructions**

Submission to be uploaded to the Moodle site as a word document (doc., docx., not write protected) through the Moodle site so it is processed by Turnitin. De-identified DICOM images uploaded to a Google drive folder and shared with unit coordinator.

### **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**

### **Assessment Type**

Professional Practice Placement

## **Task Description**

**To pass this assessment you must achieve a minimum of 640 hours (16 X 40 hours) of direct echocardiography observance/participation approved by an ASAR registered Clinical Supervisor or appropriately qualified medical practitioner.**

All hours worked must be entered into the Clinical Attendance Forms. These forms must be signed by your clinical supervisor (or a sonographer delegated this task by your clinical supervisor) and submitted fortnightly. The clinical attendance forms are available in the assessment block in the unit Moodle site. Students are advised to print this form and read it carefully so they understand the criteria against which clinical attendance will be evaluated.

Students are to notify the clinical placement site prior to their scheduled start time if they will be late arriving to the clinical placement site for any individual day throughout the clinical placement. Students who are absent from clinical placement due to sickness must phone their clinical supervisor and email the unit coordinator prior to the scheduled start time for that day. **For all absences, students must provide the clinical supervisor and unit coordinator with a medical certificate or statutory declaration.** Any clinical placement hours lost to sickness must be made up.

Any students who are absent from clinical placement due to injury must phone the clinical supervisor and email the unit coordinator prior to the scheduled start time for that day. Any injury that occurs while on placement must be reported immediately to the clinical supervisor and unit coordinator. Medical clearance may be required before returning to placement. For more information on this, including fitness to practice, please refer to the Clinical Placement Attendance Guidelines on the unit Moodle site. Any clinical placement hours missed due to injury must be made up.

Public holidays recognised by CQUniversity are outlined on the academic calendar. When a public holiday falls during a clinical placement block, public holiday dates can be entered as 8 hours for each day into the Clinical Attendance Form and hours are not required to be made up. If a designated University student vacation period coincides with the clinical placement period, students are expected to attend during this time. Students must be aware that the attendance of clinical placement takes precedence over any personal work commitments as related to absenteeism.

**Any days absent from the clinical site must be appropriately documented.**

## **Hours Outside of Clinical Placement**

Students are permitted to supplement up to 25% of required unit hours from outside of clinical placement. These hours must be documented within three (3) months prior to unit enrolment for approval by the Unit Coordinator. Outside of hours placement may only be used in the event of sickness or injury and may not be utilised for personal leave requests.

Supplementary hours outside of clinical placement must be verified (signed) by an ASAR accredited sonographer or appropriately qualified medical practitioner. Details of either the student's insurance, or employment, must be entered onto the Outside of Clinical Placement Attendance Form.

At the end of the scheduled 16 weeks of placement, if a student has not met the 100% attendance requirement AND does have documented justifiable grounds for absenteeism, the student will be provided additional scheduled time to make up the time they have missed. (This scheduled make-up time may not immediately follow the scheduled 16 week placement, and/or may not be at the same placement site, depending on clinical availability).

At the end of the scheduled 16 week of placement, if a student has not met the 100% attendance requirement AND does NOT have documented justifiable grounds for the absence, they will score a 'FAIL' for this assessment item.

## **Assessment Due Date**

Clinical Attendance Forms are due fortnightly with the first due Monday of week 3, usually AEST 5pm Monday 13th July. The final form and Outside Hours form is due Monday following final week of placement - usually 5pm AEST 19th October 2020.

## **Return Date to Students**

Individual student feedback will be provided only if assessment criteria deficits are identified.

## **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, a student must:



- Meet the minimum number of hours required on the attendance form
- Ensure the documentation is complete
- Submit the requested documentation via the Moodle site by the published due dates.

### Referencing Style

- [Vancouver](#)

### Submission

Online

### Submission Instructions

Submit online via Moodle.

### 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 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 standardised marking critique for both component (A) and (B). The ARPP tool is available for download on the unit Moodle site.

### Component A:

The students will view a series of echocardiographic images from four categories:

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

Each series of images will be introduced with a brief patient history and/or referral indications.

- Students will answer a series of questions corresponding to the images shown
- A maximum of 15 minutes will be allocated to each category (total 60 minutes)
- Students will be given the opportunity to go back to previous categories if time permits, but once 60 minutes has passed no additional work will be accepted.

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.

### **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 provided patient model/s. 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 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 assessment 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