



ECHO20005 Cardiac Clinical Unit 5

Term 2 - 2021

Profile information current as at 04/05/2024 11:53 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 - 2021

- 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

Tutorials included real world examples of pathology and commentary aimed at engaging students at all levels of understanding. This either confirmed knowledge or highlighted what needed revising.

Recommendation

Tutorials will continue to focus on clinical cases linked with theoretical knowledge. The aim of developing clinical reasoning, interpretation and revision in preparation for the OSCE's.

Feedback from Unit Evaluations

Feedback

Feedback was provided at every stage of the unit via responses to e-mailed questions, submitted case studies, and general reminders and tips were provided on the Moodle page.

Recommendation

Feedback and tips to improve clinical skills will continue to be provided.

Feedback from Unit Evaluations

Feedback

Tutorial times were scheduled too late in the day after a full day on clinical placement.

Recommendation

Review the timing of delivery so that it is not too late in the day after a full day of clinical work whilst on placement.

Feedback from WIL Placement Evaluation Forms

Feedback

Clinical cases were shared a few days prior to each tutorial so students had the opportunity to review and formulate answers. These should be shared a week before each tutorial so the weekends can be used for revision.

Recommendation

The timing each tutorial will reviewed to allow for adequate revision time.

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

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	○	○		○	
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%	○	○			○	○	○	

Assessment Tasks	Graduate Attributes							
	1	2	3	4	5	6	7	8
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

Tarryn Cremin Unit Coordinator
t.cremin@cqu.edu.au

Paula Boucaut Unit Coordinator
p.boucaut@cqu.edu.au

Schedule

Week 1 - 28 Jun 2021

Module/Topic

Chapter

Events and Submissions/Topic

This unit consists of a sixteen (16) week clinical placement of 640 hours (16 x 40 hours).

Clinical placement dates may vary between individual students, by arrangement 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.

Due dates will depend on individual start date of clinical placement.

Week 2 - 05 Jul 2021

Module/Topic

Chapter

Events and Submissions/Topic

Chamber Quantification

Week 3 - 12 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Cardiomyopathy		Clinical Attendance Form 1 due by Monday at 5pm AEST.

Week 4 - 19 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Stress Echocardiography, Ischaemic Heart Disease and Complications of Myocardial Infarction		

Week 5 - 26 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Regurgitation		Clinical Attendance Form 2 due by Monday at 5pm AEST.

Week 6 - 02 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Stenosis		

Week 7 - 09 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Prosthetic Valves		Clinical Attendance Form 3 due by Monday at 5pm AEST.

Week 8 - 16 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Assessment Preparation		Case Study 1 due by Friday at 5pm AEST.

Week 9 - 23 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
		Mid-placement GAPA due by Monday at 5pm AEST.
Endocarditis and Cardiac Masses		Mid-placement Clinical Case Log due by Monday at 5pm AEST.
		Clinical Attendance Form 4 due by Monday at 5pm AEST.

Week 10 - 30 Aug 2021

Module/Topic	Chapter	Events and Submissions/Topic
Pericardial Disease		

Week 11 - 06 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
Aortopathies		Clinical Attendance Form 5 due by Monday at 5pm AEST.

Week 12 - 13 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
Assessment Preparation		Case Study 2 due Friday at 5pm AEST.
		Practical Assessment should be performed in or before week 12.

Week 13 - 20 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
Systemic Disease with Cardiac Manifestations		Clinical Attendance Form 6 due by Monday at 5pm AEST.

Week 14 - 27 Sep 2021

Module/Topic	Chapter	Events and Submissions/Topic
Adult Congenital Heart Disease		

Week 15 - 04 Oct 2021

Module/Topic	Chapter	Events and Submissions/Topic
Artefacts and Imaging Modalities		Clinical Attendance Form 7 due by Monday at 5pm AEST.

Week 16 - 11 Oct 2021

Module/Topic	Chapter	Events and Submissions/Topic
OSCE Preparation		Final GAPA to be completed.

Assessments - 18 Oct 2021

Module/Topic	Chapter	Events and Submissions/Topic
		NOTE: Due dates will depend on individual start date for clinical placement.

The following final week assessments are due on the Monday immediately following clinical placement completion:

- Practical Assessment
- Final GAPA assessment
- Clinical Attendance Form 8
- Complete Clinical Case Log Book

OSCE assessments will be scheduled in the weeks following conclusion of clinical placement block. Dates will be published on the unit Moodle site.

Exam Week - 18 Oct 2021

Module/Topic	Chapter	Events and Submissions/Topic

Term Specific Information

The Unit Coordinator for ECHO20005 is Tarryn Cremin. The preferred method for contacting Tarryn is via the Q&A forum located on the Moodle site. If the query is of a personal nature, please email t.cremin@cqu.edu.au, or phone (02) 9324 5034. Tarryn is based on the Sydney campus and works Monday to Thursday.

This clinical unit starts on the 28th of June 2021 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 to by both the unit coordinator and clinical supervisor.

Please note: clinical placement start dates may vary between students, by agreement with the Unit Coordinator/Head of Course. As such, assessment due dates may vary and are related to individual clinical placement start dates.

Where 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.

Placement blocks are not automatically extended beyond individually advised start/finish dates due to student absences mid practicum. Placement extensions require industry supervisor, unit coordinator and Head of Course approval. In the absence of timely notifications and submission of appropriate documentation, attendance shortfalls may delay student graduation, with outstanding hours requiring completion during an alternative practicum experience.

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 discussions 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 Zoom 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 a single assessment task in a pass/fail unit will be deemed to have failed that unit, unless the unit profile includes provision for assessment re-attempt.

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 tool. A downloadable copy of the Practical Assessment marking tool can be found on the Moodle site. Students are required to provide a printed copy of this document to their clinical supervisor at the commencement of placement.

Students are encouraged to:

- Read the marking tool carefully, to 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

Should a student fail this assessment, only one re-attempt will be permitted.

- This assessment task must be completed prior to the completion of the student's clinical placement block
- It is recommended that the first attempt takes place on or before the 12th week of placement, thus allowing sufficient time for improvement before a second attempt (if needed)
- 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 tool before submission through the assessment block in the unit Moodle site. A completed Practical Assessment marking tool, 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. 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.

Assessment Due Date

Practical Assessment marking tool and DICOM images are due the Monday immediately following each assessment attempt.

Return Date to Students

Clinical supervisors will provide direct feedback at time of assessment. Any student who fails the first attempt will receive prioritised feedback from the unit coordinator.

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).

Assessment Criteria

The Practical Assessment marking tool lists the criteria against which the student's sonographic skill, and relevant theoretical knowledge, will be evaluated. This tool can be found on the unit Moodle site. During 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 Assessment marking tool. 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, while a score of 4 indicates largely independent practice,

requiring direction or prompting only on complex or unusual cases.

DICOM images are also moderated by the unit coordinator, after Practical Assessment submission.

Referencing Style

- [Vancouver](#)

Submission

Online

Submission Instructions

Practical Assessment marking tool is to be uploaded through the Moodle assessment tab. De-identified DICOM images are to be uploaded to a Google drive folder and shared with the 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. Students are provided access to that workplace on the condition 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 student's 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 day-to-day performance. These observations and collected feedback relate to the 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.

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.

This assessment is performed TWICE during the placement - at the midpoint (week 8) and at completion (week 16).

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

- Reflect on performance
- Develop an 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 will contact CQUniversity academics immediately when this occurs. A GAPA assessment is requested at this time (which could be at any point

during placement). If the outcome of this GAPA is a FAIL grade, and/or the site feedback indicates 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 be terminated immediately.**

Clinical sites may prematurely terminate a clinical placement if student skill progression is deemed insufficient, despite documented constructive feedback, significant support and intervention. Prior to confirmation of clinical placement termination, extensive consultation in conjunction with both the university designated Unit Coordinator and student involved would occur.

Assessment Due Date

First submission due Monday of week 9 of clinical placement. Second submission due Monday immediately following completion of clinical placement.

Return Date to Students

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

Weighting

Pass/Fail

Minimum mark or grade

The final GAPA, at the completion of clinical 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 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 the student does not demonstrate this behavioural attribute, or demonstrates it in an unacceptable manner
- A score of 1 indicates the student demonstrates this behavioural attribute, but needs some improvement
- A score of 2 indicates the student consistently demonstrates this behavioural 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 of the risk of failing ECHO20005 and provide formative feedback via email. The student must respond to this email to show understanding of 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 student's 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 final GAPA assessment occurs during week 16 of 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 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 by the Monday immediately following the end of week 8 and week 16 of 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 completed or fully completed echocardiography cases a student is exposed to during clinical placement. The Clinical Case Log Book will also incorporate details of case exposure obtained during any hours of attendance submitted from 'outside of clinical placement'.

Maintenance of the Clinical Case Log Book 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 Log Book incorporates the following data:

1. Cover page(s) which present two tables, summing weekly cumulative case volume under descriptive headings (NB. summative tally is based on actual scan findings, NOT the referral indications)
2. 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 completed or fully completed examination)
7. Case findings

The Clinical Case Log Book 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

First submission due Monday of week 9 of clinical placement. Second submission due Monday immediately following completion of clinical placement.

Return Date to Students

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

Weighting

Pass/Fail

Minimum mark or grade

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

Assessment Criteria

The Clinical Case Log Book serves as a record of the depth and breadth of experience attained during clinical placement. It demonstrates the degree of progression of the student's 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 to 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; if unable to achieve the minimum number of scans, the student should contact the unit coordinator.

- In preparation for 'work readiness' upon graduation, it is reasonable to expect that by the end of this clinical placement block students will be completing daily caseloads nearer 10 scans per day.
- Caseloads will depend upon departmental expectations, clinical pathologies encountered, and individual student autonomy, proficiency and competency.

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

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

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

Referencing Style

- [Vancouver](#)

Submission

Online

Submission Instructions

Two separate submissions of the Clinical Case Log Book via Moodle by the Monday immediately following week 8 and week 16 of clinical placement.

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 are 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 the clinical supervisor).

A 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 they have performed as part of their clinical workload
- Facilitate the continued development of student clinical reasoning and ensure exposure to a variety of clinical cases
- Encourage student reflection and self improvement of 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)

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.

Image Submission:

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 to 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. Marks will be deducted if the word count is under/over the word limit, as per the marking rubric.

Referencing:

Vancouver. Minimum of 8 peer reviewed journal articles/relevant text books must be cited. Literature titles must be current (< 5 years of age), except for seminal works. Support material for Vancouver Referencing System is available on the Moodle site.

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

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

Assessment Due Date

First submission due Friday of week 8 of clinical placement. Second submission due Friday of week 12 of clinical placement.

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.

Assessment Criteria

Case Study submissions will be evaluated using the 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

There are two components to this assessment.

- Students must achieve a minimum mark of 65% for the written component of the Case Study
- 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% of total rubric mark allocation per day (or part there of); 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.

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. All hours documented must be 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. Any student absent from clinical placement due to illness or injury must phone their 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.

For all absences, students must provide the clinical supervisor and unit coordinator with a medical certificate or statutory declaration. Any clinical placement hours lost due to illness or 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 Clinical Attendance Form. This form is available on the unit Moodle site.

At the end of the scheduled 16 weeks of placement, if a student has not met the 100% attendance requirement AND has provided 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 of clinical placement. The final form and any Outside Clinical Attendance Form is due the Monday immediately following final week of placement.

Return Date to Students

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

Weighting

Pass/Fail

Minimum mark or grade

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 Clinical Attendance Form
- Ensure documentation is complete
- Submit 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 echocardiographic 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.

Assessment Due Date

OSCE assessments will be scheduled in the weeks following conclusion of clinical placement block. Dates 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 spectral Doppler interpretation, including haemodynamic evaluation and severity classification
- Imaging and measurement optimisation, artefacts and caveats
- Pathophysiology of disease processes
- 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 RE-SIT will be provided for either component. Re-sit schedules will be advised by Moodle at the time of result publication.

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