

Profile information current as at 10/04/2024 03:47 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 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 anddiagnostic 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 <u>Assessment Policy and Procedure (Higher Education Coursework)</u>.

# Offerings For Term 2 - 2022

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 <u>CQUniversity Policy site</u>.

## Previous Student Feedback

## Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

## Feedback from Moodle Student Unit and Teaching survey, WIL Placement Evaluation form.

### **Feedback**

Case studies reinforced concepts and provided valuable feedback.

#### Recommendation

Case studies will continue to provide a significant degree of feedback. Formulating hypotheses, critiquing scanning and measurement technique, recognising limitations and discussing pathophysiological processes in the context of real life pathology are all important concepts to prepare students in their Echocardiography career and to prepare them for their final Objective Structured Clinical Examination (OSCE) assessment.

## Feedback from In-class (Zoom tutorial) feedback.

### **Feedback**

Tutorials were interactive and focused on interpretation of real clinical case studies. This approach helped put theoretical knowledge into clinical perspective.

### Recommendation

Continue with similar format for 2022 tutorial delivery.

## Feedback from Email feedback.

### **Feedback**

Queries and concerns were responded to promptly.

### Recommendation

The complexity of delivering a clinical unit when COVID disruptions are ever-present necessitates clear and prompt communication and this approach will continue in future deliveries.

## **Unit Learning Outcomes**

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

- 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



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 Or	ıtcar	noc						
Alignment of Graduate Attributes to Learning Ou Graduate Attributes	icoi		ning (	Outco	mes			
		1	2	2	3	4		5
1 - Knowledge		0	(	,	0	0		
2 - Communication			(	<b>)</b>		0		0
3 - Cognitive, technical and creative skills			(	,		0		
4 - Research						0		
5 - Self-management		0	(		0	0		0
6 - Ethical and Professional Responsibility			(	0		0 0		
7 - Leadership			C			۰		
8 - Aboriginal and Torres Strait Islander Cultures								
Alignment of Associanint Tacks to Craduate Att	ribut	00						
Alignment of Assessment Tasks to Graduate Att  Assessment Tasks		୯୦ duate	Attri	butes	<b>5</b>			
	1	2	3	4	5	6	7	
1 - Practical Assessment - 0%	0	0	0		0	0		
2 - Performance - 0%	0	0			0	0	0	
3 - Learning logs / diaries / Journal / log books - 0%	0				0			

Assessment Tasks	Graduate Attributes										
	1	2	3	4	5	6	7	8			
5 - Professional Practice Placement - 0%		0			0	0					
6 - Objective Structured Clinical Examinations (OSCEs) - 0%	o	0	o		0	o	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: <u>Vancouver</u> For further information, see the Assessment Tasks.

# **Teaching Contacts**

**Tarryn Cremin** Unit Coordinator <a href="mailto:t.cremin@cgu.edu.au">t.cremin@cgu.edu.au</a>

## Schedule

## - 27 Jun 2022

Module/Topic

Chapter

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

Content will be grouped and presented in modules on the Moodle site.

**Events and Submissions/Topic** 

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.

# **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 27th of June 2022 and consists of a 16 week clinical placement to achieve the minimum 640 hours (16 x 40 hours) of clinical placement. 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.

Students must attend allocated clinical placement for the entirety of each working day, including the last day of placement. Even after completing the minimum number of hours, students 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. Where public holidays occur during clinical placement, these can be entered as 8 hours on the clinical attendance form and do not need to be 'made up'. Absences due to illnesses will need to be 'made up' and require submission of supporting documentation. In these instances, the clinical supervisor and unit coordinator must be informed of unexpected absence as soon as possible.

Students who have negotiated placement extensions will be eligible for assessment extensions in relation to this. 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.

Students must maintain accurate attendance logs and communicate regularly with the unit coordinator as first point of contact, to advise when extension of placement end date may be required in order to complete unit requirements.

This is a pass / fail (non-graded) unit which means that you must pass each individual assessment in order to pass the unit. 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. If you are experiencing difficulty meeting unit assessment requirements, please contact the unit coordinator.

The final assessment for ECHO20005, the Objective Structured Clinical Examination (or OSCE), will occur in October 2022 but may be re-scheduled for some students due to staggered clinical placement commencement and completion dates. Students will be kept updated via Moodle.

During academic term 2, regular tutorials will focus on case study discussions of transthoracic, transoesophageal and/or stress echocardiography imaging. Findings, differential diagnoses, additional examinations indicated and likely clinical course will be discussed. Sources of error, technique, guidelines, protocol and examination extension will also be discussed. Resources relevant to tutorial topics will be published under respective tiles on the Moodle site.

## **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 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 (available on the unit 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

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. 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.

This assessment task must take place on or before the 12th week of placement, thus allowing sufficient time for improvement before a second attempt (if needed) prior to completion of the clinical placement block. Should the student fail the first attempt at this assessment task, they will be provided with detailed feedback regarding performance and areas requiring improvement. Should a student fail this assessment, only one re-attempt will be permitted.

### **Assessment Due Date**

Monday of clinical placement week 13, 5pm AEST

### **Return Date to Students**

Clinical supervisors will provide direct feedback at time of assessment, through both verbal conversation and return of the completed marking tool. Any student who fails the first attempt will receive prioritised feedback from the unit coordinator.

## Weighting

Pass/Fail

### **Assessment Criteria**

Clinical supervisors are required to grade their student using criterion descriptors. These criterion are considered in the context of the required competency level that students must demonstrate by the end of the clinical practicum block. For ECHO20005, this is a 'competent' level. Criteria are grouped into several main categories. These include:

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

The clinical supervisor is required to evaluate multiple descriptors under each criterion grouping on the practical assessment marking tool. The clinical supervisor or delegate may pose questions to the student prior to, during or after scan conclusion to clarify understanding of any of the assessment criteria. 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
- A score of 2 indicates the student needs frequent direction and advice
- A score of 3 indicates the student needs some direction and advice
- A score of 4 indicates independent practice, requiring direction or prompting only on complex or unusual cases

To PASS this assessment, the student must receive a score of 4 for ALL criteria descriptors, in accordance with the 'competent' competency level descriptor as detailed on the practical assessment marking tool.

DICOM images are moderated by the unit coordinator, after practical assessment submission.

The first attempt must be completed in the 12th week of the 16 week placement, and the second attempt (if required) must be conducted before the end of the 16 week clinical placement.

The practical assessment marking tool must be completed and signed by the clinical supervisor before student submission through the assessment block in the unit Moodle site. The submission must also be accompanied by deidentified DICOM images of the echocardiogram performed, uploaded to a Google drive folder and shared with the unit coordinator. All clinical information must be de-identified to protect patient privacy and confidentiality. 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 consent form provided on the unit Moodle site.

CQUniversity Assessment Policy and Procedure guidelines apply to assessments for work integrated learning units. Students are responsible for meeting published or advised submission dates. Any delays in assessment submissions during term, in the absence of an approved extension or extenuating circumstances, will be brought to the attention of the Deputy Dean of Learning and Teaching.

### **Referencing Style**

• Vancouver

### **Submission**

Online

### **Submission Instructions**

The practical assessment marking tool document 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 (available on the unit Moodle site). Students are required to provide a printed copy of this document to their clinical supervisor at the commencement of placement.

There are three main sections to the GAPA form:

- Section 1: Applied Knowledge
- Section 2: Psychomotor skills and Standard of Work
- Section 3: Professionalism

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 completion (week 16). The

first GAPA is formative. The student is expected to use feedback provided after the first GAPA, to reflect on performance and develop a 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 clinical placement week 9, at 5pm AEST. Second submission due Monday immediately following completion of clinical placement, at 5pm AEST.

### **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

### **Assessment Criteria**

To PASS this assessment, students must satisfactorily demonstrate ALL criteria descriptors by the end of placement, in accordance with the 'competent' competency level descriptor as detailed on the GAPA form.

The first GAPA is formative. 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. 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.

CQUniversity Assessment Policy and Procedure guidelines apply to assessments for work integrated learning units. Students are responsible for meeting published or advised submission dates. Any delays in assessment submissions during term, in the absence of an approved extension or extenuating circumstances, will be brought to the attention of the Deputy Dean of Learning and Teaching.

## **Referencing Style**

• <u>Vancouver</u>

### Submission

Online

## **Submission Instructions**

Two separate online submissions of the completed GAPA form via Moodle.

### **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 is a document designed to track clinical experience. This log documents all observed, partially completed or fully completed echocardiography cases 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 the clinical case log 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 incorporates the following data:

- 1. Cover page(s) which present two tables, summating 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 mid-placement submission must be complete up to the end of week 8 and include the clinical case log and clinical case log cover page. The final submission must include documentation encompassing the entire clinical placement and include the clinical case log and clinical case log cover page. The clinical case logs must be kept in excel format and submitted electronically. The clinical case log cover pages must be signed by the supervising ASAR accredited sonographer or appropriately qualified medical practitioner.

### **Assessment Due Date**

First submission due Monday of clinical placement week 9, at 5pm AEST. Second submission due Monday immediately following completion of clinical placement, at 5pm AEST.

### **Return Date to Students**

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

### Weighting

Pass/Fail

### **Assessment Criteria**

The clinical case log 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. 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 case loads nearer 10 scans per day.

However, case loads will depend upon departmental expectations, clinical pathologies encountered, and individual student autonomy, proficiency and competency.

In order to pass this assessment task, students must:

- Accurately record all studies in the clinical case log
- Ensure the clinical case log 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

CQUniversity Assessment Policy and Procedure guidelines apply to assessments for work integrated learning units. Students are responsible for meeting published or advised submission dates. Any delays in assessment submissions during term, in the absence of an approved extension or extenuating circumstances, will be brought to the attention of the Deputy Dean of Learning and Teaching.

## **Referencing Style**

• <u>Vancouver</u>

### **Submission**

Online

### **Submission Instructions**

Two separate online submissions of the Clinical Case Log 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 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). 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 continuing 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

A case study must be submitted from each of the below categories. Students who do not encounter a suitable case in clinical practice should contact the unit coordinator.

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

Each case study must include the following:

- Patient history and clinical indications
- Discussion of assessment strategy
- Case interpretation and supporting rationale
- Appropriate referencing
- Academic language and scientific terminology
- Appropriate scanning and measuring technique
- Accurate and relevant documentation

- Anonymised provisional or final echocardiographic report, included as an appendix
- Any supervisor assistance 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 to throughout both practical and written components of the case study. 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 patient consent form (available on the unit Moodle site) and this form must be submitted with the case study.

The DICOM images must be submitted to the unit coordinator via Google drive. Time and date, as well as technical information, must be retained on the images. It is the student's responsibility to ensure all technical specifications (deidentification, DICOM export with scan details intact) are met. Clinical supervisors and service representatives should be approached where local placement site settings require modification.

Vancouver referencing must be applied, and the word count (1200-1500 words) adhered to. The word count does not include headings, tables or references, but does include diagram/table explanation and labelling.

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 Monday of clinical placement week 7, at 5pm AEST. Second submission due Monday of clinical placement week 13, at 5pm AEST.

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

Feedback will be provided within two (2) weeks of each submission.

### Weighting

Pass/Fail

### **Assessment Criteria**

Students are developing aptitude and overall practical competencies consistent with that of a 'competent' entry level echocardiographer in ECHO20005. To PASS this assessment, students must successfully demonstrate ALL criteria descriptors as specified on the marking rubric.

There are two components to this assessment: the written component (case study report) and imaging component (the accompanying DICOM submission). Both components must be passed to pass the case study overall. Case studies submitted without accompanying DICOM images will not be marked.

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.

CQUniversity Assessment Policy and Procedure guidelines apply to assessments for work integrated learning units. Students are responsible for meeting published or advised submission dates. Any delays in assessment submissions during term, in the absence of an approved extension or extenuating circumstances, will be brought to the attention of the Deputy Dean of Learning and Teaching.

## **Referencing Style**

Vancouver

### **Submission**

Online

### **Submission Instructions**

WORD document to be uploaded to the Moodle site (to be processed by Turnitin). De-identified DICOM images to be 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 the clinical supervisor (or delegate sonographer) and submitted monthly. The clinical attendance forms are available in the assessment block in the unit Moodle site. Any days absent from the clinical site must be appropriately documented.

Students must notify the clinical placement site prior to their scheduled start time if they will be late arriving on 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. For these 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.

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.

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.

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 (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.

CQUniversity Assessment Policy and Procedure guidelines apply to assessments for work integrated learning units. Students are responsible for meeting published or advised submission dates. Any delays in assessment submissions during term, in the absence of an approved extension or extenuating circumstances, will be brought to the attention of the Deputy Dean of Learning and Teaching.

### **Assessment Due Date**

First submission due on the Monday following clinical week 4, at 5pm AEST. Second submission due on the Monday following clinical week 8, at 5pm AEST. Third submission due on the Monday following clinical week 12, at 9am AEST.

The final form and any Outside Clinical Attendance form is due the Monday immediately following final week of placement, at 9am AEST.

### **Return Date to Students**

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

## Weighting

Pass/Fail

#### **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 (640 hours)
- Ensure documentation is complete
- Submit requested documentation via the Moodle site by the published due dates

CQUniversity Assessment Policy and Procedure guidelines apply to assessments for work integrated learning units. Students are responsible for meeting published or advised submission dates. Any delays in assessment submissions during term, in the absence of an approved extension or extenuating circumstances, will be brought to the attention of the Deputy Dean of Learning and Teaching.

## **Referencing Style**

Vancouver

### **Submission**

Online

### **Submission Instructions**

Online submission of forms 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— Objective Structured Clinical Examination—format.

The OSCE will consist of two components: image interpretation (A) and practical skills (B). Together, these tasks will simulate clinical practice. Performance will be evaluated using the Assessment of Readiness for Professional Practice (ARPP) tool. The ARPP tool details a standardised marking critique for both component (A) and (B) and is available on the unit Moodle site.

In component (A), students will view a series of echocardiographic images from four categories: Ventricular, Valvular, Congenital and Other. 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.

- Each series of images will be introduced with a brief patient history and/or referral indications
- Students will complete a handwritten question paper, answering a series of questions corresponding to the images shown

- Students will be provided with a paper copy of the ASE quick reference guide (available on the unit Moodle site), to facilitate interpretation of pathology
- Total time allocated is 90 minutes (suggested distribution of 20 minutes per category, plus an additional 10 minutes for perusal)

In component (B), students will rotate through three different stations: VIVA (verbal discussion), Chamber Quantification, and Valve Assessment.

- At the VIVA station, students will be given a simulated patient referral and/or clinical scenario and will be assessed on a variety of aspects of clinical practice, including: professional behaviour; clinical presentations and common pathophysiology; and differential diagnoses
- At the Chamber Quantification and Valve Assessment stations, students will be asked to perform specific components of a transthoracic examination (not comprehensive examinations) on patient models
- Total time allocated is 60 minutes (20 minutes per rotation)

## **Assessment Due Date**

Scheduled for October 2022. Dates will be published on the unit Moodle site as they are confirmed. Unless negotiated with student and approved by Dean of Learning and Teaching, students are not eligible to attempt OSCEs until clinical placement hours of attendance have been completed in full.

### **Return Date to Students**

Within two weeks of OSCE completion.

### Weighting

Pass/Fail

### **Assessment Criteria**

Student performance of criteria will be considered in the context of the required competency level that students must demonstrate by the end of this clinical practicum block. For ECHO20005, the competency level required is 'competent', in preparation for graduation as an entry-level sonographer.

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

- Normal and abnormal sonographic appearances
- 2D, colour and spectral Doppler interpretation, including heamodynamic 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 overall performance will be assessed according to the ARPP tool. To achieve competency in component A, students must demonstrate an appropriate level of competence for ALL criterion descriptors listed on the ARPP tool.

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

- Professional behaviour
- Evaluation of clinical data
- Appropriate targeted protocol
- Technical proficiency
- Comparable image quality to that obtained by an experienced cardiac sonographer on the same day
- Accurate measurement acquisition

Experienced echocardiography staff members will observe and/or form discussion with students at each of the three (3) stations. Overall student performance will be assessed according to the ARPP tool. To achieve competency in component B, students must demonstrate an appropriate level of competence for ALL criterion descriptors listed 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**

• <u>Vancouver</u>

### **Submission**

Offline

### **Submission Instructions**

Assessor will complete the ARPP marking tool for components A and B of the OSCE 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 <u>Academic Learning Centre (ALC)</u> can support you in becoming confident in completing assessments with integrity and of high standard.

### What can you do to act with integrity?



### **Be Honest**

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



### Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



### **Produce Original Work**

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem