ECHO28003 *Valvular Heart Disease*

Term 1 - 2023

Profile information current as at 22/05/2024 08:40 am

All details in this unit profile for ECHO28003 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 unit will develop your knowledge of the application of cardiac ultrasound in the assessment of valvular heart disease, preparing you for competent practise in the health workplace as a graduate cardiac sonographer. Knowledge presented will elaborate on the aetiology, pathophysiology and clinical presentation of aortic, mitral, tricuspid and pulmonic heart disease. You will identify the role echocardiography and other cardiac imaging modalities (including cardiac catheterisation, transoesophageal, 3D and stress echo) play in the clinical assessment and management of valvular heart disease, including surgical repair, replacement and prosthetic options. You will analyse diagnostic data, clinical scenarios and case studies, performing qualitative and quantitative haemodynamic assessment. You will identify discordant data and provide differential diagnoses within an ethical framework of best practice and patient safety.

Details

Career Level: *Postgraduate*
Unit Level: *Level 8*
Credit Points: *6*
Student Contribution Band: *8*
Fraction of Full-Time Student Load: *0.125*

Pre-requisites or Co-requisites

Pre-requisite: ECHO28002 Assessment of Cardiac Function
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 1 - 2023

- Online

Attendance Requirements

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

Website

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

Class and Assessment Overview

Recommended Student Time Commitment

Each 6-credit Postgraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

Regional Campuses
Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

Metropolitan Campuses
Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Case Study**
Weighting: Pass/Fail
2. **Online Quiz(zes)**
Weighting: 40%
3. **Online Test**
Weighting: 60%
4. **Learning logs / diaries / Journal / log books**
Weighting: Pass/Fail

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the University's Grades and Results Policy for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the CQUniversity Policy site.
You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the CQUniversity Policy site.

Previous Student Feedback

Feedback, Recommendations and Responses

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

Feedback from Tutorial feedback.

Feedback
Students found live broken down examples of calculations useful

Recommendation
Continue current tutorial format with the addition of calculation based examples.

Feedback from Tutorial feedback.

Feedback
Students mentioned some lectures were repetitive and difficult to follow due to different presentation styles of lecturers.

Recommendation
Lecture content will be revised where necessary to improve consistency.

Unit Learning Outcomes

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

1. Differentiate between the aetiology, pathophysiology and echocardiographic assessment processes associated with a variety of valvular heart diseases
2. Critically analyse case-based clinical information to formulate differential diagnoses and plan patient management
3. Perform advanced haemodynamic calculations applied to 2D, colour and spectral Doppler derived echocardiographic data, excluding discordant data with justification
4. Articulate the role of echocardiography in mechanical and bio-prosthetic valve assessment and interventional strategies
5. Compare and contrast assessment data acquired from a variety of alternate imaging modalities, including cardiac catheterisation, transoesophageal, 3D, and stress echocardiography
6. Engage in cardiac ultrasound practice as per external accreditation requirements (Australasian Sonographer Accreditation Registry).

Linked to the Australian Sonographers Accreditation Registry (ASAR) Accreditation Standards for Cardiac Sonography:
Foundation Units of Competence

- Unit 1: Deliver safe, patient centred service
- Unit 2: Practice within professional and ethical frameworks
- Unit 3: Locate, analyse and synthesise information to support evidence based practice
- Unit 4: Contribute to workplace health and safety and quality assurance
- Unit 5: Communicate effectively

Critical Practice Unit of Competence

- Unit 8: Cardiac

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	6
1 - Case Study - 0%	•	•	•		•	•
2 - Online Quiz(zes) - 40%	•	•	•		•	
3 - Online Test - 60%	•	•	•	•	•	
4 - Learning logs / diaries / Journal / log books - 0%						•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes					
	1	2	3	4	5	6
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 - Case Study - 0%	○	○	○	○		○		
2 - Online Quiz(zes) - 40%	○	○	○	○				
3 - Online Test - 60%	○	○	○	○				
4 - Learning logs / diaries / Journal / log books - 0%	○	○	○		○	○		

Textbooks and Resources

Textbooks

ECHO28003

Prescribed

A SONOGRAPHER'S GUIDE TO THE ASSESSMENT OF HEART DISEASE
Edition: 1st (2014)
Authors: Bonita Anderson
Echotext
Brisbane , Queensland , Australia
ISBN: 978-0-9923222-0-5
Binding: Hardcover

ECHO28003

Prescribed

BASIC to ADVANCED Clinical Echocardiography: A Self-Assessment Tool for the Cardiac Sonographer
Edition: 1st (2021)
Authors: Bonita Anderson, Margaret Park
Wolters Kluwer
Philadelphia , Pennsylvania , United States of America
ISBN: 978-1-975136-27-7
Binding: eBook

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

Mahomed Osman Unit Coordinator
m.osman@cqu.edu.au

Schedule

Week 1 - 06 Mar 2023

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to valvular pathology	See eReading list via Moodle.	

Week 2 - 13 Mar 2023

Module/Topic	Chapter	Events and Submissions/Topic
Rheumatic heart disease	See eReading list via Moodle.	

Week 3 - 20 Mar 2023

Module/Topic	Chapter	Events and Submissions/Topic
Aortic valve stenosis	See eReading list via Moodle.	

Week 4 - 27 Mar 2023

Module/Topic	Chapter	Events and Submissions/Topic
Aortic valve regurgitation	See eReading list via Moodle.	

Week 5 - 03 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
Mitral valve stenosis	See eReading list via Moodle.	

Vacation Week - 10 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
		Online Quiz Opens: Tuesday 11th April 2023 8:00am (AEST) **Online Quiz Closes:** Thursday 13th April 2023 8:00pm (AEST)

Week 6 - 17 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
Mitral valve regurgitation	See eReading list via Moodle.	

Week 7 - 24 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
Tricuspid valve pathology	See eReading list via Moodle.	

Week 8 - 01 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
Pulmonary valve pathology	See eReading list via Moodle.	

Week 9 - 08 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
Prosthetic valves 1	See eReading list via Moodle.	**Case Study Due:** Friday 12th May 2023 8:00pm (AEST)

Week 10 - 15 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
Prosthetic valves 2	See eReading list via Moodle.	

Week 11 - 22 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
Advancements in valvular assessment	See eReading list via Moodle.	

Week 12 - 29 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
Revision		**Clinical Case Log Book Due:** Friday 2nd of June 2023 8:00pm (AEST)

Review/Exam Week - 05 Jun 2023

Module/Topic	Chapter	Events and Submissions/Topic
		Online Test Opens: Friday 9th June 2023 8:00am (AEST)

Exam Week - 12 Jun 2023

Module/Topic	Chapter	Events and Submissions/Topic
		Online Test Closes: Tuesday 13th June 2023 8:00pm (AEST)

Term Specific Information

Unit Delivery Details
Weekly revision material will be provided. Attempting all provided revision material will help you prepare for your online quiz and test. No new lecture material will be presented during week 12 of term. This week will be used to prepare for the final online test assessment.

Tutorials for this unit will be delivered 'live' online using ZOOM. The tutorials will focus on answering the weekly revision questions and contextualisation of key concepts in preparation for related assessments, please see the Moodle site for dates and times of tutorials.

Lectures are used to present the central information for the week's study, outlining the main theories and principles of the topic under consideration. Tutorials provide an opportunity for discussion and interaction with other students and your tutor. It is important students make the most of these interactive sessions and participate fully in order to broaden knowledge and experience with the course material.

To help staff prepare for tutorials, please post to the Q&A forum or email the unit coordinator any questions that you might have in relation to the learning material.

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

Please ensure you complete all activities listed under the Orientation tile on the Moodle site, including viewing the 'Welcome video', for further unit specific information.

Assessment Tasks

1 Case Study

Assessment Type
Case Study

Task Description
The purpose of this Case Study submission is to:

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

The submitted case study should meet the following descriptive criteria: **Significant valvular stenosis +/- regurgitation.**

There are three components to this case study submission:

1. Written case study report
2. Accompanying echocardiographic study (DICOM Images)
3. Case study presentation (formative)

The case study presentation is mandatory, however it is formative and students will not be assessed on presentation skill and ability. Case study presentations **must be completed 2 weeks prior to the submission date** via Zoom, please contact the Unit Coordinator to schedule a suitable time. The purpose of the case study presentation before the submission date is to allow for feedback to be provided to the students to enable any refinements to be made, as well as to ensure the DICOM images are accessible and appropriate.

The student must have completed the majority of the echocardiographic scan submitted (i.e. obtained no less than 60% of the submitted digital clips). Images obtained by the clinical supervisor should be identified in the written case study or annotated on the DICOM images. The student must have performed the submitted case study during the current academic term.

This is a PASS/FAIL assessment. Both components of the case study submission MUST be passed; to PASS this assessment task overall. To pass each component, **all associated criteria** detailed in the Case Study Marking Rubric must be successfully demonstrated.

The case study submission should include:

- Patient history & clinical indications.
- Discussion of assessment strategy.
- Interpretation and supporting rationale.
- Scanning technique.
- Measurement technique.
- A copy of the anonymised provisional or final echocardiogram report.
- Clear identification of any supervisor assistance provided to complete the examination.
- Use of the PEDOF non-imaging probe.

The written case study report and accompanying echocardiographic DICOM images will be critiqued using the Case Study Marking Rubric, please refer to this document for details.

The echocardiographic case study presented must be accompanied by the submission of de-identified digital images in DICOM format.

- All clinical information must be de-identified to protect patient privacy and confidentiality.
- Time and date stamp along with technical information should be retained on the echocardiographic image to facilitate marking.

If all attempts to de-identify the echocardiography images have failed, the student must request permission from the patient to provide their images to Central Queensland University 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.

Word count

1500-2000 words. Word count does not include headings, images, figures, table titles, axis labels or reference list. Descriptive captions are considered within the word count.

Referencing
Refer to the assessment criteria.

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. In the absence of an approved extension, given there is no opportunity to apply a late penalty, any submission that is late will be awarded a FAIL grade.

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

Assessment Due Date

The case study can be submitted anytime prior to the due date, 8:00 pm (AEST) Friday 12th May 2023.

Return Date to Students

Results will be made available within two weeks of assessment due date.

Weighting
Pass/Fail

Assessment Criteria
This is a PASS/FAIL assessment. Both components of the case study submission must be passed to achieve an overall pass mark for this assessment task. To pass each component, all associated criteria detailed in the Case Study Marking Rubric must be successfully demonstrated.
The written case study and accompanying echocardiography DICOM images will be critiqued using the detailed marking rubric which can be found on the Moodle site.
The rubric will evaluate the following criteria:
Patient history and clinical indications

- Appropriate description of relevant past and current clinical history, including identification of cardiovascular risk factors through patient interaction.
- Appropriate interpretation of clinical indications, identification of differential hypotheses and expected echocardiographic findings.

Assessment strategy

- Provision of a rational outline for protocol extension based on echocardiographic findings and/or clinical indication.
- Performance of relevant quantitative and qualitative measures where appropriate.
- Interpretation of echocardiographic findings with reference to relevant guidelines, including severity of pathology.
- Objective discussion of scan and measurement limitations, detailing the overall impact on the outcome of the examination.

Interpretation and supporting rationale

- Appropriate clinical reasoning, discussion of aetiology, pathophysiology, secondary cardiac complications and expected patient management.
- Demonstrates appropriate understanding of patient's condition as well as understanding of anatomy and physiology relevant to the examination.

Referencing and academic writing

- Use of Vancouver reference style with all cited literature current (<5 years old unless seminal works), and provision of at least 8 references.
- Appropriate use of tables, images, academic language, scientific terminology, grammar and consistent formatting.
- Commitment to academic integrity and word count within appropriate limits (1500-2000 words).

Scanning and measurement technique

- Demonstrates a systematic and logical scanning protocol, completed within an appropriate time frame.
- Appropriate optimisation of 2D imaging, colour Doppler and spectral Doppler throughout the scan.
- Correct application of continuous-wave Doppler, pulsed-wave Doppler and use of the non-imaging continuous-wave probe where indicated.
- Appropriate measurements performed suited to the complexity of the study and student competency level.
- Satisfactory measurement technique demonstrated, consistent with American Society of Echocardiography best practice guidelines.

Documentation

- Appropriately de-identified DICOM images and labelled images (where acquired by student supervisor).
- Appropriate annotations and body markers used where applicable.
- Student has completed case study presentation via Zoom with Unit Coordinator 2 weeks prior to due date.

Case studies submitted without accompanying echocardiographic DICOM images will not be marked, and will automatically be awarded a FAIL grade.

Submissions not up to standard will be returned to the student with appropriate feedback. Only one opportunity for re-submission will be provided if the first submission is deemed a FAIL.

- From the time of feedback provision, failing students will be provided with 2 weeks to resubmit case study.
- Failed students may be asked to resubmit further imaging exemplars and/or an amended written submission, dependent upon deficits identified in the first submission.
- Should the imaging component need to be re-submitted, the second submission does not need to be from the same patient.

Referencing Style

- Vancouver

Submission
Online

Submission Instructions
The case study DICOM images are to be loaded into a 'folder' created by the student on google drive, and shared with

the unit coordinator through the provision of a link. The written case study component must be uploaded through the assessment tab on Moodle as a 'Word' or 'PDF' document. The 'Google folder URL link' details should be clearly displayed on the front page of the assessment submission. Both the 'Google folder' and the 'Word / PDF' document must be appropriately labelled with student name, student number and descriptor (E.g. 'John SMITH_S12345_Case Study').

Learning Outcomes Assessed

- Differentiate between the aetiology, pathophysiology and echocardiographic assessment processes associated with a variety of valvular heart diseases
- Critically analyse case-based clinical information to formulate differential diagnoses and plan patient management
- Perform advanced haemodynamic calculations applied to 2D, colour and spectral Doppler derived echocardiographic data, excluding discordant data with justification
- Compare and contrast assessment data acquired from a variety of alternate imaging modalities, including cardiac catheterisation, transoesophageal, 3D, and stress echocardiography
- Engage in cardiac ultrasound practice as per external accreditation requirements (Australasian Sonographer Accreditation Registry).

Graduate Attributes

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

2 Online Quiz

Assessment Type
Online Quiz(zes)

Task Description
The quiz will assess your understanding of the content presented within this unit as outlined below. Questions may be drawn from lectures, additional resources provided (e.g. prescribed readings) or tutorial presentations.

- The quiz will assess the topics covered during weeks 1 to 4.
- Questions will be drawn from a resource bank, to allow tests to be different for each student.
- Questions may include multiple choice, short answer, or image interpretation format.
- It is recommended that you have a calculator available when sitting a quiz.

Quiz can be accessed through the assessment tab on Moodle at the assigned time.

- Students will have 60 minutes to complete the quiz.
- Open book conditions.

Once started, the quiz cannot be paused or restarted. Only one attempt per quiz is permitted.
Please note:

- It is the student's responsibility to commence the Online Quiz with adequate time to complete the test prior to the close time.
- The quiz will automatically close and submit completed student answers once the allocated time has elapsed.
- The duration of the quiz is tailored to promote recall of fact, rather than research of answers unknown.
- In the absence of an approved extension, given there is no opportunity to apply a late penalty, students will receive a mark of zero (or fail for this assessment) if not completed by the scheduled date and time.

Students are reminded that IT support from the university Information and Technology Division (TASAC) is only available during AEST business hours (Monday to Friday).

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.

Number of Quizzes
1

Frequency of Quizzes
Other

Assessment Due Date

Quiz will open at 8:00 am (AEST) on Tuesday 11th April and will close at 8:00 pm (AEST) Thursday 13th April 2023.

Return Date to Students

Results will be made available within two weeks of assessment due date. The Online Quiz question pool in its entirety will not be released to students.

Weighting
40%

Minimum mark or grade
50%

Assessment Criteria
Students will be required to answer a variety of online questions.

Question responses will be assessed according to the:

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

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

Referencing Style

- Vancouver

Submission
Online

Submission Instructions
The Online Quiz will be accessible through the assessment tab on Moodle.

Learning Outcomes Assessed

- Differentiate between the aetiology, pathophysiology and echocardiographic assessment processes associated with a variety of valvular heart diseases
- Critically analyse case-based clinical information to formulate differential diagnoses and plan patient management
- Perform advanced haemodynamic calculations applied to 2D, colour and spectral Doppler derived echocardiographic data, excluding discordant data with justification
- Compare and contrast assessment data acquired from a variety of alternate imaging modalities, including cardiac catheterisation, transoesophageal, 3D, and stress echocardiography

Graduate Attributes

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research

3 Online Test

Assessment Type
Online Test

Task Description
This Online Test will assess your understanding of **all content** presented within this unit. Questions may be drawn from content presented in lectures, additional resources provided (e.g. prescribed readings) and tutorial presentations.

- **Perusal time and Online Test duration will be 130 minutes in total.**
- **Open book conditions.**
- **It is recommended that you have a calculator available when sitting the online test.**

Once started, the Online Test cannot be paused or restarted. Only one attempt is permitted.

Please note:

- It is the student's responsibility to commence the Online Test with adequate time to complete the test prior to the close time.
- The Online Test will automatically close and submit completed student answers once the allocated time has elapsed.
- The duration of this test is tailored to promote recall of fact, rather than research of answers unknown.

Students will be required to answer a variety of online questions. Questions:

- May include multiple choice, short answer, essay style or image interpretation format.
- Will be drawn from a resource bank, to allow tests to be different for each student.

Students will be required to be familiar with both normal and pathological echocardiographic and anatomical images.

Students are reminded that IT support from the university Information and Technology Division (TASAC) is only available during AEST business hours (Monday to Friday).

In the absence of an approved extension, given there is no opportunity to apply a late penalty, students will receive a mark of zero (or fail for this assessment) if not completed by the scheduled date and time.

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

The Online Test will open at 8:00 am (AEST) on Friday 9th June, and will close at 8:00 pm (AEST) on Tuesday 13th June 2023.

Return Date to Students

Results will be made available within two weeks of assessment due date. The Online Test question pool in its entirety will not be released to students.

Weighting
60%

Minimum mark or grade
50%

Assessment Criteria
Question responses will be assessed according to the:

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

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

Referencing Style

- Vancouver

Submission
Online

Submission Instructions
The Online Test will be accessible through the assessment tab on Moodle.

Learning Outcomes Assessed

- Differentiate between the aetiology, pathophysiology and echocardiographic assessment processes associated with a variety of valvular heart diseases
- Critically analyse case-based clinical information to formulate differential diagnoses and plan patient management
- Perform advanced haemodynamic calculations applied to 2D, colour and spectral Doppler derived echocardiographic data, excluding discordant data with justification

- Articulate the role of echocardiography in mechanical and bio-prosthetic valve assessment and interventional strategies
- Compare and contrast assessment data acquired from a variety of alternate imaging modalities, including cardiac catheterisation, transoesophageal, 3D, and stress echocardiography

Graduate Attributes

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research

4 Clinical Case Log Book

Assessment Type
Learning logs / diaries / Journal / log books

Task Description
The Clinical Case Log Book and Clinical Attendance Log Book are documents designed to track clinical experience. The log books document all observed, partially or fully completed echocardiography cases that a student is exposed to during clinical employ. It is recommended that you update this logbook daily.

This assessment task requires the submission of a clinical case log book and clinical attendance log book, detailing clinical experience since last requested log book submission.

A template for the Clinical Case Log book and Clinical Attendance Log Book is supplied in a word document format on the Moodle site. Students were supplied the same documents at the time of course enrolment.

- The word document is designed to facilitate easy electronic submission at various checkpoints throughout unit and course enrolment. The clinical supervisor's digital signature can be used to verify authenticity of entries on the word document.
- Alternatively, the word document can be printed, manually completed and scanned to a digital file format for submission.

A Clinical Case Log Book/Clinical Attendance Log Book submission can be requested at any point during course enrolment, at the discretion of the university course coordinator.

The 'Clinical Case Log book' incorporates the following data:

1. The date of each examination.
2. Allocation of a unique identifier for each patient to ensure anonymity.
3. Referral indications
4. Type of echocardiogram performed (i.e. Adult, Paediatric, Stress/Dobutamine, TOE)
5. Student level of scan participation (Observed, partially, or fully completed examination)
6. Case Findings

It is required that a student participate in an average of 180 echocardiographic studies per 12 week term to meet course requirements. (This is an average of 5 scans per day, 3 days per week.)

Assessment Due Date

The Clinical Case Log Book and Clinical Attendance Log Book must be submitted by 8:00 pm (AEST) on Friday 2nd June 2023.

Return Date to Students

Results will be made available within two weeks of assessment due date.

Weighting
Pass/Fail

Assessment Criteria
To be awarded a PASS, all documentation must be completed and submitted by the corresponding due date and time. The Clinical Case Log book will be reviewed to ensure that:

- An acceptable volume of clinical work has been achieved.
- Exposure to sufficient case study complexity has been demonstrated to support ongoing knowledge and practical skill development.
- Cases have been documented appropriately.

Referencing Style

- Vancouver

Submission
Online

Submission Instructions
The Clinical Case Log Book must be uploaded through the assessment tab on Moodle as a single 'PDF' document. The document must be appropriately labelled with student name, student number and descriptor (E.g. 'John SMITH_S12345_Clinical Case Log Book').

Learning Outcomes Assessed

- Engage in cardiac ultrasound practice as per external accreditation requirements (Australasian Sonographer Accreditation Registry).

Graduate Attributes

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

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