

Profile information current as at 25/04/2024 11:39 pm

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 <a href="Assessment Policy and Procedure (Higher Education Coursework)">Assessment Policy and Procedure (Higher Education Coursework)</a>.

## Offerings For Term 1 - 2021

• 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: 60%

Weighting: Pass/Fail 2. **Online Quiz(zes)** Weighting: 40% 3. **Online Test** 

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 <u>University's Grades and Results Policy</u> 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.

## **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

1 - Knowledge

## Alignment of Learning Outcomes, Assessment and Graduate Attributes Intermediate Introductory Professional Graduate Advanced Level Level Level Level Level Level Alignment of Assessment Tasks to Learning Outcomes **Assessment Tasks Learning Outcomes** 1 3 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** 5 6

Graduate Attributes				Lo	earni	ng Ou	itcom	es	
				1	2	3	4	5	6
2 - Communication				0	٥	0	0	0	o
3 - Cognitive, technical and creative skills				0	٥	0	۰	o	o
4 - Research					o	۰		o	
5 - Self-management									o
6 - Ethical and Professional Responsibility								0	٥
7 - Leadership									
8 - Aboriginal and Torres Strait Islander Cultures									
Alignment of Assessment Tasks to Grad	uate Attri	but	es						
Assessment Tasks		Gra	duate	Attrik	utes				
		1	2	3	4	5	6	7	
								-	8
1 - Case Study - 0%		0	o	o	0		o		8
1 - Case Study - 0% 2 - Online Quiz(zes) - 40%		0	0	0	0		0		8
·							o		8

## 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

#### **Additional Textbook Information**

Prescribed Echocardiography textbooks will be utilised across multiple units within the Graduate Diploma of Cardiac Ultrasound program.

## **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**

### **Anthony Spencer** Unit Coordinator

a.v.spencer@cqu.edu.au

## Schedule

### Week 1 - 08 Mar 2021

Module/Topic Chapter Events and Submissions/Topic

Anderson B. A Sonographer's Guide to the Assessment of Heart Disease. 1st ed. Brisbane: MGA Graphics; 2014.

Introduction to valvular pathology Chapter 1, pp. 9-16.

Additional resources specified in

eReading list.

Week 2 - 15 Mar 2021		
Module/Topic	Chapter	Events and Submissions/Topic
Rheumatic heart disease	Resources specified in eReading list	
Week 3 - 22 Mar 2021		
Module/Topic	Chapter	<b>Events and Submissions/Topic</b>
Aortic valve stenosis	Anderson B. A Sonographer's Guide to the Assessment of Heart Disease. 1st ed. Brisbane: MGA Graphics; 2014. Chapter 7, pp. 177-195. Chapter 15, pp. 452-455.	
	Additional resources specified in eReading list.	
Week 4 - 29 Mar 2021		
Module/Topic	Chapter	Events and Submissions/Topic
Aortic valve regurgitation	Anderson B. A Sonographer's Guide to the Assessment of Heart Disease. 1st ed. Brisbane: MGA Graphics; 2014. Chapter 7, pp. 196-214.	
	Additional resources specified in eReading list.	
Week 5 - 05 Apr 2021		
Module/Topic	Chapter	<b>Events and Submissions/Topic</b>
Mitral valve stenosis	Anderson B. A Sonographer's Guide to the Assessment of Heart Disease. 1st ed. Brisbane: MGA Graphics; 2014. Chapter 7, pp. 215-235.	
	Additional resources specified in eReading list.	
Vacation Week - 12 Apr 2021		
Module/Topic	Chapter	Events and Submissions/Topic  Online Quiz Closes: Friday (16 April 2021) 8:00pm AEST
Module/Topic  Week 6 - 19 Apr 2021	Chapter	Online Quiz Closes:
•	Chapter	Online Quiz Closes:
Week 6 - 19 Apr 2021	Chapter  Anderson B. A Sonographer's Guide to the Assessment of Heart Disease. 1st ed. Brisbane: MGA Graphics; 2014. Chapter 7, pp. 235-254.	Online Quiz Closes: Friday (16 April 2021) 8:00pm AEST
Week 6 - 19 Apr 2021 Module/Topic	Chapter  Anderson B. A Sonographer's Guide to the Assessment of Heart Disease. 1st ed. Brisbane: MGA Graphics; 2014.	Online Quiz Closes: Friday (16 April 2021) 8:00pm AEST
Week 6 - 19 Apr 2021 Module/Topic	Chapter  Anderson B. A Sonographer's Guide to the Assessment of Heart Disease. 1st ed. Brisbane: MGA Graphics; 2014. Chapter 7, pp. 235-254.  Additional resources specified in	Online Quiz Closes: Friday (16 April 2021) 8:00pm AEST
Week 6 - 19 Apr 2021  Module/Topic  Mitral valve regurgitation	Chapter  Anderson B. A Sonographer's Guide to the Assessment of Heart Disease. 1st ed. Brisbane: MGA Graphics; 2014. Chapter 7, pp. 235-254.  Additional resources specified in	Online Quiz Closes: Friday (16 April 2021) 8:00pm AEST
Week 6 - 19 Apr 2021 Module/Topic  Mitral valve regurgitation  Week 7 - 26 Apr 2021	Chapter  Anderson B. A Sonographer's Guide to the Assessment of Heart Disease. 1st ed. Brisbane: MGA Graphics; 2014. Chapter 7, pp. 235-254.  Additional resources specified in eReading list.	Online Quiz Closes: Friday (16 April 2021) 8:00pm AEST  Events and Submissions/Topic
Week 6 - 19 Apr 2021 Module/Topic  Mitral valve regurgitation  Week 7 - 26 Apr 2021 Module/Topic	Chapter  Anderson B. A Sonographer's Guide to the Assessment of Heart Disease. 1st ed. Brisbane: MGA Graphics; 2014. Chapter 7, pp. 235-254.  Additional resources specified in eReading list.  Chapter  Anderson B. A Sonographer's Guide to the Assessment of Heart Disease. 1st ed. Brisbane: MGA Graphics; 2014.	Online Quiz Closes: Friday (16 April 2021) 8:00pm AEST  Events and Submissions/Topic
Week 6 - 19 Apr 2021 Module/Topic  Mitral valve regurgitation  Week 7 - 26 Apr 2021 Module/Topic	Chapter  Anderson B. A Sonographer's Guide to the Assessment of Heart Disease. 1st ed. Brisbane: MGA Graphics; 2014. Chapter 7, pp. 235-254.  Additional resources specified in eReading list.  Chapter  Anderson B. A Sonographer's Guide to the Assessment of Heart Disease. 1st ed. Brisbane: MGA Graphics; 2014. Chapter 7, pp. 255-275.  Additional resources specified in	Online Quiz Closes: Friday (16 April 2021) 8:00pm AEST  Events and Submissions/Topic

Week 9 - 10 May 2021       Chapter       Events and Submissions/Topic         Prosthetic valves 1       Resources specified in eReading list.         Week 10 - 17 May 2021       Events and Submissions/Topic         Module/Topic       Chapter       Events and Submissions/Topic         Prosthetic valves 2       Resources specified in eReading list.       Case Study Due: Week 10 Friday (2 May 2021) 7:00 pm AEST         Week 11 - 24 May 2021       Module/Topic       Events and Submissions/Topic         Advancements in valvular assessment       Events and Submissions/Topic         Week 12 - 31 May 2021       Events and Submissions/Topic         Review/Exam Week - 07 Jun 2021       Chapter       Events and Submissions/Topic         Module/Topic       Chapter       Events and Submissions/Topic         Module/Topic       Chapter       Events and Submissions/Topic         Online Test Closes: Friday (11 June 2021) 8:00pm AEST
Prosthetic valves 1 Resources specified in eReading list.  Week 10 - 17 May 2021  Module/Topic Chapter Events and Submissions/Topic Case Study Due: Week 10 Friday (2 May 2021) 7:00 pm AEST  Week 11 - 24 May 2021  Module/Topic Chapter Events and Submissions/Topic Advancements in valvular assessment  Week 12 - 31 May 2021  Module/Topic Chapter Events and Submissions/Topic Revision  Review/Exam Week - 07 Jun 2021  Module/Topic Chapter Events and Submissions/Topic Online Test Closes:
Week 10 - 17 May 2021         Module/Topic       Chapter       Events and Submissions/Topic         Prosthetic valves 2       Resources specified in eReading list.       Case Study Due: Week 10 Friday (2 May 2021) 7:00 pm AEST         Week 11 - 24 May 2021       Chapter       Events and Submissions/Topic         Advancements in valvular assessment       Week 12 - 31 May 2021         Module/Topic       Chapter       Events and Submissions/Topic         Review/Exam Week - 07 Jun 2021       Chapter       Events and Submissions/Topic         Module/Topic       Chapter       Events and Submissions/Topic         Online Test Closes:       Online Test Closes:
Module/Topic Chapter Events and Submissions/Topic Case Study Due: Week 10 Friday (2 May 2021) 7:00 pm AEST  Week 11 - 24 May 2021  Module/Topic Chapter Events and Submissions/Topic Advancements in valvular assessment  Week 12 - 31 May 2021  Module/Topic Chapter Events and Submissions/Topic Events and Submissions/Topic Revision  Review/Exam Week - 07 Jun 2021  Module/Topic Chapter Events and Submissions/Topic Online Test Closes:
Prosthetic valves 2 Resources specified in eReading list.  Week 11 - 24 May 2021  Module/Topic Chapter Events and Submissions/Topic  Module/Topic Chapter Events and Submissions/Topic  Revision  Review/Exam Week - 07 Jun 2021  Module/Topic Chapter Events and Submissions/Topic  Revision Events and Submissions/Topic  Online Test Closes:
Week 11 - 24 May 2021  Module/Topic Chapter Events and Submissions/Topic  Module/Topic Chapter Events and Submissions/Topic  Module/Topic Chapter Events and Submissions/Topic  Revision  Review/Exam Week - 07 Jun 2021  Module/Topic Chapter Events and Submissions/Topic  Revision Events and Submissions/Topic  Online Test Closes:
Module/Topic Chapter Events and Submissions/Topic  Advancements in valvular assessment  Week 12 - 31 May 2021  Module/Topic Chapter Events and Submissions/Topic  Revision  Review/Exam Week - 07 Jun 2021  Module/Topic Chapter Events and Submissions/Topic  Online Test Closes:
Advancements in valvular assessment  Week 12 - 31 May 2021  Module/Topic Chapter Events and Submissions/Topic Revision  Review/Exam Week - 07 Jun 2021  Module/Topic Chapter Events and Submissions/Topic Online Test Closes:
Week 12 - 31 May 2021  Module/Topic Chapter Events and Submissions/Topic Revision  Review/Exam Week - 07 Jun 2021  Module/Topic Chapter Events and Submissions/Topic Online Test Closes:
Module/Topic Chapter Events and Submissions/Topic Revision  Review/Exam Week - 07 Jun 2021  Module/Topic Chapter Events and Submissions/Topic Online Test Closes:
Revision  Review/Exam Week - 07 Jun 2021  Module/Topic Chapter Events and Submissions/Topic Online Test Closes:
Review/Exam Week - 07 Jun 2021  Module/Topic Chapter Events and Submissions/Topic Online Test Closes:
Module/Topic Chapter Events and Submissions/Topic Online Test Closes:
Online Test Closes:
Clinical Case Log Book Due: Review/Exam Week Monday (7 June 2021) 7:00 pm AEST
Exam Week - 14 Jun 2021
Module/Topic Chapter Events and Submissions/Topic

## **Term Specific Information**

#### **Unit Coordinator and Contact details**

The unit coordinator for ECHO28003 Valvular Heart Disease is Anthony Spencer. The most efficient and preferred method of contacting Anthony and other staff involved in the running of this unit is via the Q&A forum located on the unit Moodle site. If your query is of a personal nature, please contact Anthony directly via email (a.v.spencer@cqu.edu.au) or phone (08 9260 4079). While Anthony will endeavor to deal with all enquiries as soon as possible, please be aware he works a three day week at Central Queensland University, being Wednesday - Friday.

Multiple academic staff will be providing presentations and hosting tutorials as part of this unit's delivery. Contact details for other academic staff can be found on the Moodle site.

#### 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 links required for accessing the tutorials are provided on the Moodle site under the weekly tile). The tutorials will focus on answering the weekly revision questions and contextualisation of key concepts in preparation for related assessments.

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 weekly 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 and moderate 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:

Valvular stenosis and / or significant valvular regurgitation (greater than mild regurgitation).

There are two components to this case study submission:

- 1. Written case study.
- 2. Accompanying echocardiographic DICOM study.

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 on the DICOM digital clips themselves. The student must have performed the submitted case study during the current academic term.

The case study submission should include:

- Referral details provided by requesting Doctor.
- 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, including justification.
- Identification of study limitations (imaging and/or measurement).
- Detailed description of study findings and pathology identified, including grading of severity in accordance with ASE guidelines.
- Discussion of aetiology and pathophysiology.
- Discussion of appropriate additional investigations indicated (i.e. stress or dobutamine echocardiography, transesophageal echocardiography, left or right heart catheterisation, MRI etc).
- Brief explanation of likely or expected disease progression and patient management (including any follow up consultation or testing details if available at time of case study completion).
- A copy of the anonymised provisional or final echocardiographic report.
- Clear identification of any supervisor assistance provided to complete the examination.

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 display.

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.

A detailed marking rubric can be found on the Moodle site.

**This is a PASS/FAIL assessment.** Both components of the case study submission must be passed, to PASS this assessment task overall.

**Word count:** 1500-2000 words. Word count does not include headings or references but does include diagram explanations and labelling.

**Referencing:** Vancouver. Minimum 3 peer reviewed journal articles must be cited. Literature titles must be current (<5 years of age), excepting seminal works.

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**

Week 10 Friday (21 May 2021) 7:00 pm AEST

The case study can be submitted anytime prior to the end of week 10.

## **Return Date to Students**

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

## Weighting

Pass/Fail

#### Minimum mark or grade

The pass mark for the written component of the case study is 60%. A late penalty of 5% will be deducted for each part day that submission is late. The echocardiographic imaging component of the case study is a PASS/FAIL submission.

#### **Assessment Criteria**

The written case study and accompanying echocardiography DICOM images will be critiqued using a detailed marking rubric which can be found on the Moodle site. This rubric will evaluate:

- The diagnostic quality of the examination performed, in particular, the scan technique and protocol adopted by the student.
- Image optimisation and image selection representative of pathology.
- Measurement technique.
- Discussion of clinical presentation, aetiology, pathophysiology, echocardiographic findings, patient management and likely follow-up.
- Student's reflective analysis identifying components of the scan that could have been improved.
- Ability to construct a scholarly report that is succinct and demonstrates appropriate application of scientific and language conventions.
- Referencing.

Case studies submitted without accompanying echcoardiographic 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 resubmission 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**

• <u>Vancouver</u>

#### **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.

- 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 guiz.

#### 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 before 7:00pm Friday 16th April 2021 (AEST).
- The quiz will automatically close and submit completed student answers once the allocated time has elapsed.
- The duration of the guiz is tailored to promote recall of fact, rather than research of answers unknown.
- In the absence of an approved extension, there will be no opportunity to complete the task after this date, and there will be no opportunity to apply a late penalty of five percent per day.
- Students will receive a mark of zero (or fail) for this assessment, if you have not completed it by the scheduled date and time and do not have an extension.

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**

## **Frequency of Quizzes**

#### **Assessment Due Date**

Quiz will open at 8:00 am (AEST) on Wednesday 14th April (Break Week) and will close at 8:00 pm (AEST) Friday 16th April. The quiz will assess the topics covered during weeks 1 to 4.

#### **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

To PASS this assessment task, a minimum of 50% must be achieved.

#### **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 guiz 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 the 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 before 5:50pm Friday 11th June 2021 (AEST).
- 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, this assessment cannot be completed at a later time. Students will receive a mark of zero (or fail) for this assessment, if you have not completed it by the scheduled date and time and do not have an extension.

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 Wednesday 9th June, and will close at 8:00 pm (AEST) on Friday 11th June.

#### **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

60%

### Minimum mark or grade

To PASS this assessment task, a minimum of 50% must be achieved.

#### **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 is a document designed to track clinical experience. This log book documents all observed, partially or fully completed echocardiography cases that a student is exposed to during clinical employ. It is recommended that you update this logbook daily.

This assessment task requires the submission of a clinical case log book, detailing clinical experience since course enrolment.

A template for the Clinical Case Log book is supplied in a word document format on the Moodle site. Students were supplied this same Clinical Case Log Book 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 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 recommended that a student participate in an average of 180 echocardiographic studies per 12 week term of course enrolment. (This is an average of 5 scans per day, 3 days per week.)

#### **Assessment Due Date**

Review/Exam Week Monday (7 June 2021) 7:00 pm AEST

#### **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 <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