



MEDS20008 Advanced Musculoskeletal Ultrasound Upper Body

Term 1 - 2020

Profile information current as at 14/05/2024 04:08 pm

All details in this unit profile for MEDS20008 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 advances your clinical practice in the field of musculoskeletal ultrasound of the upper body. You will deepen your knowledge and understanding of sonographic anatomy, pathophysiology and dynamic function of the musculoskeletal systems in the upper body. You will appreciate the role of ultrasound in clinical assessment, and patient management, including interventional procedures. To successfully complete this unit you will need access to musculoskeletal ultrasound examinations in the clinical context. This unit includes an optional residential school comprising practical training in advanced upper body musculoskeletal ultrasound.

Details

Career Level: *Postgraduate*

Unit Level: *Level 9*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

There are no requisites for this unit.

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 - 2020

- 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).

Residential Schools

This unit has a Optional Residential School for distance mode students and the details are:

Click here to see your [Residential School Timetable](#).

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. **Written Assessment**

Weighting: 50%

2. **Online Test**

Weighting: 50%

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 Moodle site feedback.

Feedback

Include practice quiz questions in each week's Moodle content so as to provide some guide related to the level of detail required in order to better perform on the end of term on-line test.

Recommendation

Provide practice quiz questions each week in unit Moodle site.

Feedback from Moodle site feedback.

Feedback

Practical scanning videos were difficult to find on unit Moodle site.

Recommendation

Revise Moodle site to ensure resource navigation is clearer.

Feedback from Moodle site feedback.

Feedback

Students found the Zoom tutorial format collaborative and relevant to their practice.

Recommendation

Ensure Zoom tutorial sessions remain clinically relevant and relaxed so as to foster an interactive and interesting learning format.

Unit Learning Outcomes

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

1. Analyse sonographic anatomy and appearances of normal and pathological musculoskeletal structures of the upper body
2. Research the role of ultrasound in the clinical assessment, diagnosis and treatment of a patient.

The Masters course does not lead to entry into the sonography profession but is rather provided to qualified practitioners to allow advanced practice. Therefore it does not require external accreditation. The Master of Medical Ultrasound qualifies as Continuing Professional Development (CPD) activity (activity code 10B - Australian Sonographers Accreditation Registry (ASAR)).

Alignment of Learning Outcomes, Assessment and Graduate Attributes

 N/A Level	 Introductory Level	 Intermediate Level	 Graduate Level	 Professional Level	 Advanced Level
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Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes	
	1	2
1 - Written Assessment - 50%		•
2 - Online Test - 50%	•	

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes	
	1	2
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 - Written Assessment - 50%	○	○	○	○	○	○		
2 - Online Test - 50%	○	○	○					

Textbooks and Resources

Textbooks

MEDS20008

Prescribed

Ultrasound of the Musculoskeletal System

Edition: 1 (2007)

Authors: Stephano Bianchi and Carlo Martinoli

Springer-Verlag

Berlin Heidelberg , New York , USA

ISBN: 978-3-540-28163-4

Binding: eBook

Additional Textbook Information

A digital copy of the prescribed text is available as a free download from the CQUniversity library.

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Web camera and microphone to join online sessions

Referencing Style

All submissions for this unit must use the referencing styles below:

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)
- [Vancouver](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Brendan Goode Unit Coordinator

b.goode@cqu.edu.au

Michelle Fenech Unit Coordinator

m.fenech@cqu.edu.au

Schedule

Week 1 - 09 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to unit, revision of basics of musculoskeletal (MSK) ultrasound and assessment task overview	Chapters 1-5 As this unit covers content relating to advanced MSK ultrasound, some general knowledge of the basics of MSK ultrasound is assumed. These chapters from the prescribed text, <i>Ultrasound of the Musculoskeletal System</i> by Bianchi and Martinoli, are available to read to refresh your understanding of the basics. Lectures in this and following weeks.	Zoom tutorial Tuesday 6 pm AEST (Australian Eastern Standard Time).

Week 2 - 16 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Brachial plexus and muscles that stabilise the shoulder	Chapter 6 Lectures are available.	Zoom tutorial Monday at 6 pm AEST.

Week 3 - 23 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Shoulder and axilla	Chapter 6 Lectures are available.	Zoom tutorial Monday at 6 pm AEST.

Week 4 - 30 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Upper arm	Chapter 7 Lectures are available.	Zoom tutorial Wednesday at 6 pm AEST.

Week 5 - 06 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Elbow	Chapter 8 Lectures are available.	Zoom tutorial Monday at 6 pm.

Vacation Week - 13 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Enjoy the break this week.		

Week 6 - 20 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Forearm	Chapter 9 Lectures are available.	Zoom tutorial Monday 6 pm.

Week 7 - 27 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Wrist	Chapter 10 Lectures are available.	Zoom tutorial Thursday at 6 pm.

Week 8 - 04 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Hand	Chapter 11 Lectures are available.	Zoom tutorial Wednesday at 6 pm. Essay Due: Week 8 Wednesday (6 May 2020) 1:00 pm AEST

Week 9 - 11 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Fingers and thumb	Chapter 11 Lectures are available.	No Zoom tutorial this week.

Week 10 - 18 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Interventional techniques and revision.	Lectures are available.	Zoom tutorial Monday 6 pm.

Week 11 - 25 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Revision	Additional revision in preparation for online test.	Zoom tutorial 6 pm Monday.

Week 12 - 01 Jun 2020

Module/Topic	Chapter	Events and Submissions/Topic
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Online test.

Online test opens Friday 9:00 am.

Review/Exam Week - 08 Jun 2020

Module/Topic

Chapter

Events and Submissions/Topic

Online test closes Friday 9:00 am.

Online test.

Online Test Due: Review/Exam Week
Friday (12 June 2020) 9:00 am AEST

Exam Week - 15 Jun 2020

Module/Topic

Chapter

Events and Submissions/Topic

Term Specific Information

Welcome to MEDS20008 - Advanced Musculoskeletal Sonography Upper Body. My name is Brendan Goode and I will be the unit coordinator for term 1 2020. For some of you this will be the first time you have undertaken formal study for a while. Reengagement with formal learning can be daunting and overwhelming so please, if you are unsure of any aspect of the unit it is best to contact me early, b.goode@cqu.edu.au or phone 03 - 96160519. All of you entering this unit have in common a desire to learn more about musculoskeletal (MSK) sonography however, MSK experience levels vary widely from years to virtually nil. The variations in sonography backgrounds you bring presents challenges to teaching however, it presents us with fantastic opportunities to learn by drawing on each others unique experience and knowledge.

However, in order to learn from each other there needs to be a medium for the exchange of ideas/perspectives. In the top left of the unit Moodle site a 'Discussion' tab is present. Through the discussion tab you can share ideas and answer each others questions. Additionally I monitor the conversation, interjecting to add additional information or correct misinformation. Additionally there will be regular on-line video conferencing Zoom tutorial sessions run throughout term. It is via these Zoom tutorial sessions that genuine engagement occurs so please attend as many of the sessions as possible.

It is important to be aware that the optional residential school indicated in the unit overview will not be occurring in term 1 2020.

One other point to note is the unit prescribed text; Ultrasound of the Musculoskeletal System by Bianchi and Martinoli. Although this text is older than I would like it is still widely recognised as the most comprehensive and detailed text related to Musculoskeletal sonography. In addition as a CQUniversity student you have access to a free digital download of the text through the CQUniversity library and many radiology departments will have a copy of this text available. Additional information supplementing the prescribed text will be present during term providing you with up-to-date MSK sonography knowledge. Images contained within the prescribed text are accurate however some sonographic images are of reduced imaging quality when compared with the modern machines we are using today. For an easy to read, recently published text I would suggest Fundamentals of Musculoskeletal Ultrasound by Jon A Jacobson 3rd Edition 2017. Jacobson's text does not have the level of detail provided by Bianchi and Martinoli however, the sonographic images and on-line video's are more reflective of our current imaging level.

Once again welcome to the unit, I hope you enjoy the learning and challenges the unit will provide along with the opportunity to engage with other sonographer's who like yourself are passionate about MSK sonography.

Assessment Tasks

1 Essay

Assessment Type

Written Assessment

Task Description

Compose an essay that researches the role of ultrasound in the assessment and treatment of an upper body region of your choice.

The essay should be written and structured in an academic fashion that requires you to research, analyze, critically reflect on and synthesize current peer reviewed medical literature of your selected topic. A high level of communication skill needs to be utilized to convey a clear and concise message. All statements of fact, anatomical drawings and sonographic images should clearly indicate they are original or be properly referenced according to Vancouver or APA 6 referencing style.

Assessment Due Date

Week 8 Wednesday (6 May 2020) 1:00 pm AEST
Submitted through the assessment tab on Moodle.

Return Date to Students

Week 10 Monday (18 May 2020)
Returned via Moodle.

Weighting

50%

Minimum mark or grade

50%

Assessment Criteria

Your essay will be assessed on academic writing and should contain content which is;

1/ Structured, comprising sections addressing; abstract, table of contents, introduction, aims and objectives, literature review, examination methodology, normal and abnormal sonographic appearances, anatomy, conclusion and references.

2/ Logical and

3/ Coherent.

In addition the content should contain a clear and concise message at an appropriate length based upon assessment word count. The essay should be proof read and edited with accurate spelling, grammar and written using vocabulary appropriate for your target audience.

Content of essay - The aim of your work should be clearly stated. Your work should show clear relevance to sonography including anatomy, sonographic appearance and pathophysiology, incorporating diagrams and images to support your discussion. Evidence based, peer reviewed material must be used and appropriately referenced. All ultrasound images must be original and de-identified or properly referenced with written permission from the original author/s if sourced from elsewhere. Your work should include a structured abstract of 200 to 250 words on a separate page to the body of your essay.

Suitability for presentation - Your essay should be suitable for publication and the subject matter clearly relevant to the sonography community.

Referencing - In-text references and the reference list must be accurate and complete, utilize Vancouver or APA 6th style and use quality and relevant sources.

Word count - 2000 +/- 10%, excluding references, titles, headings, image descriptions, tables, abstract and contents page.

Font - Arial or Calibri, size 12 with 1.5 spacing.

A cover page should be included specifying; unit code and name, essay title, your name and student number, unit coordinator and word count.

The Marking rubric to be used is available on Moodle.

You need to obtain a minimum mark of 50% in the essay to allow a pass grade in this unit.

Referencing Style

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)
- [Vancouver](#)

Submission

Online

Submission Instructions

Submit via Moodle under the assessment tab - submit via Assessment 1 - written assessment

Learning Outcomes Assessed

- Research the role of ultrasound in the clinical assessment, diagnosis and treatment of a patient.

Graduate Attributes

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

2 Online Test

Assessment Type

Online Test

Task Description

An online test will be conducted to assess your understanding of the content in this unit and its clinical application. The test will be accessed through the assessment tab on Moodle and you will require internet access to complete this test.

It will comprise of 10 questions which will require you to provide typed written answers.

Each question will be worth 10 marks. The test will be open for 1.5 hours which will allow nine (9) minutes per question and only one attempt of the test is allowed.

Once the test is commenced, it cannot be paused, stopped or re-started. Once you have completed the test, it cannot be re-taken.

You will need to allocate a 90 minute period throughout the week that the test is open where you have good internet connection to allow the test to be completed.

The questions for this online test will be drawn from a pool of questions to allow tests to be different for each student undertaking this unit.

You must commence the test at least 90 minutes prior to the closing time of the test. If you have not completed the test by this time, your test will be closed automatically.

Assessment Due Date

Review/Exam Week Friday (12 June 2020) 9:00 am AEST

This online test will be open for one week from 9:00 am Friday 5th of June until 9:00 am Friday 12th of June. The test must be undertaken at some stage during the week it is open.

Return Date to Students

Exam Week Friday (19 June 2020)

Results will be posted on Moodle.

Weighting

50%

Minimum mark or grade

50%

Assessment Criteria

Image viewing questions will be included. You will need to be familiar with normal and pathological sonographic imaging of the upper body and the associated anatomy which has been discussed in this unit.

Your answers may require you to describe sonographic appearances of structures and determine if they appear sonographically normal or not.

You may be asked how a sonographic examination may be extended to demonstrate an area further to confirm a diagnosis.

Your answers need to be detailed enough to allow you to gain 10 marks for each answer you provide.

You need to obtain a minimum score of 50% of the available marks in this online test to allow you to pass this unit.

Referencing Style

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)
- [Vancouver](#)

Submission

Online

Submission Instructions

You need to access the test through the assessment tab on Moodle and will need to maintain internet access for 90 minutes to complete the test.

Learning Outcomes Assessed

- Analyse sonographic anatomy and appearances of normal and pathological musculoskeletal structures of the upper body

Graduate Attributes

- Knowledge
- Communication
- Cognitive, technical and creative skills

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