



MEDS20008 Advanced Musculoskeletal Ultrasound Upper Body

Term 1 - 2019

Profile information current as at 14/05/2024 11:19 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 - 2019

- 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 Student feedback.

Feedback

Large amount of lectures, which were enjoyed by students and they found them beneficial, but would like some additional videos of how to perform scans.

Recommendation

This is a theoretical unit, so theoretical knowledge and communication is assessed. Additional videos of scans being performed have been recorded and can be added to the learning resources, and this will aid sonographers in their clinical practice, but this will also add to the large amount of learning resources already available in this unit.

Feedback from Student feedback

Feedback

Diagrams to be provided in larger format so easier to read.

Recommendation

Larger diagrams to be provided.

Feedback from Student feedback

Feedback

Short lecture format allowed information to be absorbed in a manageable format.

Recommendation

Continue to provide shorter lectures.

Feedback from Student feedback

Feedback

Foundational lectures provided to ensure basic understanding of musculoskeletal ultrasound were appreciated and aided students with limited musculoskeletal ultrasound experience undertaking this advanced MSK unit.

Recommendation

Continue to provide foundational lectures.

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 |
|---|--|--|--|--|--|

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

There is a hardcover copy and an ebook available for this text.

The ebook version is also able to be borrowed from the CQU 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 style: [Vancouver](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Brendan Goode Unit Coordinator

b.goode@cqu.edu.au

Schedule

Week 1 - 11 Mar 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|--|---|
| Introduction to unit, revision of basics of 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, Ultrasound of the Musculoskeletal System by Bianchi and Martinoli, are available to read to refresh your understanding of the basics. Lectures are available. | Zoom tutorial Monday 11th of March at 7 pm AEST (Australian Eastern Standard Time). |

Week 2 - 18 Mar 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|--------------------------------------|------------------------------|
| Brachial plexus and muscles that stabilise the shoulder | Chapter 6 Lectures are available. | |

Week 3 - 25 Mar 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|---------------------|--------------------------------------|--|
| Shoulder and axilla | Chapter 6 Lectures are available. | Zoom tutorial Monday the 25th of March at 7 pm AEST. |

Week 4 - 01 Apr 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|--------------------------------------|------------------------------|
| Upper arm | Chapter 7 Lectures are available. | |

Week 5 - 08 Apr 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|--------------------------------------|--|
| Elbow | Chapter 8 Lectures are available. | Zoom tutorial Monday 8th of April at 7 pm AEST |

Vacation Week - 15 Apr 2019

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

Week 6 - 22 Apr 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|--------------------------------------|--|
| Forearm | Chapter 9 Lectures are available. | Zoom tutorial Wednesday 30th of April at 7 pm AEST |

Week 7 - 29 Apr 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|---------------------------------------|--|
| Wrist | Chapter 10 Lectures are available. | E-poster Due: Week 7 Monday (29 Apr 2019) 10:00 am AEST |

Week 8 - 06 May 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|---------------------------------------|------------------------------|
| Hand | Chapter 11 Lectures are available. | |

Week 9 - 13 May 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------|---------------------------------------|--|
| Fingers and thumb | Chapter 11 Lectures are available. | Zoom tutorial Monday 13th of May at 7 pm AEST. |

Week 10 - 20 May 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|-------------------------|--|
| Interventional techniques and revision. | Lectures are available. | Zoom tutorial Monday 20th of May at 7 pm AEST. Last tutorial before online test. |

Week 11 - 27 May 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|--|------------------------------|
| Revision | Time to revise in preparation for online test. | Online test opens. |

Week 12 - 03 Jun 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|---------|--|
| Online test. | | Online Test Due: Week 12 Friday (7 June 2019) 10:00 am AEST |

Review/Exam Week - 10 Jun 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|---------|------------------------------|
|--------------|---------|------------------------------|

Exam Week - 17 Jun 2019

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|---------|------------------------------|
|--------------|---------|------------------------------|

Term Specific Information

Welcome to MEDS20008, my name is Brendan Goode and I will be the unit coordinator. I am based on the Melbourne campus of CQUniversity and can be contacted via phone (03) 96160519 or preferably via email b.goode@cqu.edu.au. Each week the unit Moodle site will be devoted to a different aspect of this speciality sonographic field as outlined in the schedule section of the eProfile. In addition to the lectures provided by Michelle Fenech and other industry experts, it is expected that you will attend the regular Zoom tutorial sessions held during term with the times outlined in this unit profile and Zoom links provided in each relevant week. While Zoom tutorial sessions will be recorded, these recordings are not a substitute for active participation as I find students develop a deeper understanding of the unit content if they attend Zoom sessions rather than watching recordings.

As part of this unit there will be two assessment tasks, both of which must be passed in order to successfully complete this unit;

1/ An ePoster

2/ Online test.

In addition to the lectures provided by Michelle Fenech, Dr Jessie Childs, email Jessie.Childs@unisa.edu.au, will be aiding you in the development of your ePoster.

Assessment Tasks

1 E-poster

Assessment Type

Written Assessment

Task Description

Develop an educational e-poster that clearly discusses the sonographic examination of a specific upper body musculoskeletal region to be presented to fellow professionals.

The presentation is to be limited to ten (10) slides with the first slide as 'title' and the last as 'reference'.

An abstract is required to accompany the e-poster.

The e-poster should be written at a level suitable for presentation at a conference. You must state which conference you would intend it to be presented at (nominate your intended audience). The first slide should be the title slide. This should contain the title of the presentation, your name, qualifications and current workplace. The subsequent content slides should have clear headings.

The sonographic examination of a musculoskeletal region outlined in the ePoster should be clinically relevant. The anatomy, sonographic appearance of normal structures, discussion of why the examination may be undertaken and pathology that may be encountered in the region should be discussed. You are required to have researched, analyzed, critically reflected on and synthesized current medical literature. A high level of communication skills needs to be utilized to convey a clear and concise message. All anatomical drawings should be original or properly referenced. All slides are to be in 'landscape' format.

Assessment Due Date

Week 7 Monday (29 Apr 2019) 10:00 am AEST

Submitted through the assessment tab on Moodle.

Return Date to Students

Week 9 Monday (13 May 2019)

Returned via Moodle.

Weighting

50%

Minimum mark or grade

50%

Assessment Criteria

Your e-poster will be assessed on:

Academic writing - it should contain content which is;

1/ Organized

2/ Logical and

3/ Coherent.

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

Content of e-poster - The purpose of your poster should be clear and relevant with the anatomy, sonographic appearance and pathophysiology discussed with diagrams and images used to support the discussion. Evidence based content must be used and appropriately referenced. All ultrasound images must be original and de-identified or properly referenced if sourced from elsewhere.

Suitability for presentation - your e-poster should be suitable for presentation at the conference you have selected and the subject matter relevant to the selected audience.

Referencing - In-text references and the reference list must be all accurate and complete and utilized correctly in the correct style (Vancouver) with quality and appropriate sources utilized. The last slide of the ePoster should be the reference list.

The Marking rubric to be used is available on Moodle.

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

Referencing Style

- [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

Week 12 Friday (7 June 2019) 10:00 am AEST

This online test will be open for one week from Friday 31st of May, 2019 at 9 am (week 11) to Friday 7th June, 2019 at 10 am. The test must be undertaken at some stage during the week it is open.

Return Date to Students

Review/Exam Week Friday (14 June 2019)

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 demonstrated which have 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

- [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