



# MEDS20006 *Advanced Musculoskeletal Ultrasound Lower Body*

## Term 2 - 2018

Profile information current as at 20/04/2024 12:59 pm

All details in this unit profile for MEDS20006 have been officially approved by CQUUniversity 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 is designed to advance your clinical practice in the field of musculoskeletal ultrasound of the lower body. You will deepen your knowledge and understanding of sonographic anatomy, pathophysiology and dynamic function of the musculoskeletal systems in the lower body. You will appreciate the role of ultrasound in clinical assessment, diagnosis, patient management and treatment, 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 lower 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 2 - 2018

- Distance

### 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**

Ability to get feedback on written assessment drafts prior to submission allows for deeper learning

**Recommendation**

continue with this.

#### Feedback from student feedback

**Feedback**

Would like some quizzes added to aid learning throughout the term

**Recommendation**

formative quizzes to be added

#### Feedback from student feedback

**Feedback**

More practice online test questions would help as many students have not undertaken formal testing in quite a few years

**Recommendation**

More practice online test questions to be provided

## 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 lower body
2. Research the role of ultrasound in the clinical assessment, diagnosis and treatment of a patient.

This masters unit 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) recognised by the Australian Sonographers Accreditation Registry (ASAR).



## Textbooks and Resources

### Textbooks

MEDS20006

#### Prescribed

#### Ultrasound of the Musculoskeletal system

Edition: 1 (2007)

Authors: Stefano Bianchi and Carlo Martinoli

Springer-Verlag Berlin Heidelberg

New York , New York , USA

ISBN: ISBN 978-3-540-28163-4

Binding: eBook

#### Additional Textbook Information

There is an e-copy of this text available from the library which you can borrow.

### IT Resources

#### You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Computer with camera and microphone to participate in tutorials via zoom

## Referencing Style

All submissions for this unit must use the referencing style: [Vancouver](#)

For further information, see the Assessment Tasks.

## Teaching Contacts

**Michelle Fenech** Unit Coordinator

[m.fenech@cqu.edu.au](mailto:m.fenech@cqu.edu.au)

## Schedule

### Week 1 Introduction and Revision of basic concepts of MSK Ultrasound - 09 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Advanced MSK ultrasound - Lower body Revision of basics of MSK ultrasound Assessment tasks explained	Chapters 1 - 5 of the prescribed text (Ultrasound of the Musculoskeletal System by Bianchi et al.) As this unit covers content relating to advanced MSK ultrasound, some general knowledge of the basics of MSK ultrasound is assumed. These chapters are available to read to refresh your understanding of the basics. Lectures are available to supplement this reading. Lectures are provided about the assessment tasks for this unit.	

### Week 2 Abdominal and pelvic muscles - 16 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic
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Abdominal wall and pelvic floor muscles	Lectures are available to cover the content for this week.	Tutorial - Monday night (16 July) 7 pm (AEST) via zoom
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### Week 3 The groin - 23 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic
The groin	Chapter 12 Lectures are available.	

### Week 4 The Hip, gluteal compartments and adductors - 30 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic
Hip, buttocks (superficial and deep gluteal compartments) and adductors	Chapter 12 Lectures are available.	Tutorial Monday night (30 July) 7 pm (AEST) via zoom

### Week 5 Hamstrings - 06 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
Hamstrings	Chapter 13 Lectures are available.	

### Vacation Week - 13 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
Break week - no content delivered this week - time to catch up		

### Week 6 - Anterior and Medial thigh - 20 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
Thigh- Anterior and Medial thigh	Chapter 13 Lectures are available.	Tutorial Monday night (20 August) 7 pm (AEST) via zoom

### Week 7 The Knee - 27 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
The Knee	Chapter 14 Lectures are available.	

### Week 8 The Calf - 03 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
The Calf	Chapter 15 Lectures are available.	Tutorial Monday night (3 September) 7 pm (AEST) via zoom  <b>E-poster</b> Due: Week 8 Monday (3 Sept 2018) 9:00 am AEST

### Week 9 The Ankle - 10 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
The ankle	Chapter 16 Lectures are available.	

### Week 10 The Foot - 17 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
The Foot	Chapter 17 Lectures are available.	Tutorial Monday night (17 September) 7 pm (AEST) via zoom

### Week 11 - Revision and interventional techniques - 24 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
Revision and Interventional techniques	Chapter 18 Lectures are available.	Time to revise in preparation for online test opening next week.

### Week 12 Revision and Online test - 01 Oct 2018

Module/Topic	Chapter	Events and Submissions/Topic
Revision and online test		Ensure you sit the online test. Opens Tuesday 2nd October at 9 am, and closes Tuesday 9th October at 9am.

## Term Specific Information

Your unit coordinator is Michelle Fenech. Email: m.fenech@cqu.edu.au or phone 07 3295 1180.

Michelle may be in sonography labs, so may not be able to take all phone calls. Please leave a message and also email if you wish to discuss a matter on the phone.

As this is a 6 credit point unit, you are expected to spend on average 12.5 hours each week on study activities for this unit.

This time includes:

- Watching recorded lectures
- Creating study notes to meet weekly learning objectives using lectures and readings
- Researching and working on your written assessment
- Completing practice test questions.

Attendance at tutorials is recommended (recordings of these will be made available on Moodle).

Discussions about unit content are provided in the tutorials, and they also provide mentoring about your written assessment submission and prepare you for your online test by going through practice test questions and answers.

In order to pass this unit you must attain at least 50% overall and meet the minimum mark of 50% in each assessment task.

## Assessment Tasks

### 1 E-poster

#### Assessment Type

Written Assessment

#### Task Description

You are required to develop an educational e-poster that clearly discusses the sonographic examination of a specific lower body musculoskeletal region or structure which is clinically relevant.

The e-poster will:

- Be developed using power-point slides.
- Be written at a level suitable for presentation at a conference with an audience of fellow sonographers/medical/allied health professionals. You need to develop a research question which will be answered. You will be required to conduct a literature search to aid the development of your question. The research question and answer must be clearly articulated in the poster, including the provision of a memorable 'take home' message.
- Demonstrate research, analysis and a critical reflection on current medical literature pertaining to your selected topic.
- Demonstrate a high level of communication skills and appropriate scientific language to convey a clear and concise message.
- Contain figures, tables and/or diagrams to enhance the text. Figures/tables/diagrams must be original, or proof of permission to re-use must be provided.

The e-poster will contain:

- Title slide - contains the title of presentation, your name, current workplace, qualifications and the conference chosen for your intended audience
- Abstract slide - an unstructured abstract is required.
- 8 Slides for the body of the poster - this must include an introduction, body and conclusion
- 1 slide for references.

Total of 11 slides maximum. All power point slides are to be used in 'landscape' format with no animations.

#### Assessment Due Date

Week 8 Monday (3 Sept 2018) 9:00 am AEST

**Return Date to Students**

Week 10 Monday (17 Sept 2018)

Returned within 2 weeks of due date

**Weighting**

50%

**Minimum mark or grade**

50%

**Assessment Criteria**

Your e-poster will be assessed on:

1. Academic writing - The e-poster should be organised, logical and coherent, with a clearly defined research question, message and answer and at an appropriate length. Your e-poster should be proof read and edited with accurate spelling and grammar. Scientific language needs to be used appropriate for your selected target audience.
2. Content of e-poster - The purpose of the poster should be clear and relevant to the discipline and inform the reader of results of recent research studies which are not available in current texts. Evidence based content must be used. Current gaps in knowledge must be identified and opportunities for areas of research highlighted. All ultrasound images should be de-identified and original, or if images are to be re-used from current literature, proof of permission to re-use must be provided.
3. Suitability for presentation at a conference - Your e-poster should be suitable for a presentation to fellow professionals, and the subject matter chosen, must be relevant to the audience selected. Topics that will enhance the body of knowledge of the audience should be selected.
4. Referencing - Adequate in-text citations should be used with appropriate sources which will be correctly referenced in the reference list. Vancouver referencing style is required.

The marking rubric is available on Moodle.

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

**Referencing Style**

- [Vancouver](#)

**Submission**

Online

**Learning Outcomes Assessed**

- Analyse sonographic anatomy and appearances of normal and pathological musculoskeletal structures of the lower body
- 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
- Ethical and Professional Responsibility

## 2 Online Test

**Assessment Type**

Online Test

**Task Description**

An online test will be conducted and completed to assess your understanding of content in this unit and its clinical application.

The test will

- Be accessed through the assessment tab on Moodle at the assigned time. You will require internet access to complete this test.
- Be comprised of 10 questions which will require you to provide typed written answers. Each question will be worth 10 marks.
- Be open for 90 minutes (1.5 hours) which will allow nine (9) minutes per question. 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 continuous 90 minute period during the week when the test is open, to allow the test to be completed. 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.
- Include questions from a pool of questions to allow tests to be different for each student

- Include Image viewing questions which will require you to accurately interpret sonographic images of lower body musculoskeletal structures. You will be required to determine if a pathology or injury is being demonstrated on images and justify your response using appropriate sonographic terminology. You may be asked how a sonographic examination may be extended to further demonstrate an area that informs the diagnosis. Questions will be drawn from content covered in lectures, readings and tutorial presentations.
- Be undertaken and completed as an individual. As with all other university assessments, colluding with other students on non-group work tasks is considered academic misconduct, and may lead to action being taken by the Deputy Dean of Learning and Teaching HMAS.

**Assessment Due Date**

Review/Exam Week Tuesday (9 Oct 2018) 9:00 am AEST

The online test will be open for one week. It will open at 9 am Tuesday 2nd October (week 12) and close the following Tuesday 9th October at 9am. You must allow yourself enough time to sit this test at some stage during the time it is open.

**Return Date to Students**

Exam Week Tuesday (16 Oct 2018)

**Weighting**

50%

**Minimum mark or grade**

50%

**Assessment Criteria**

You must provide short to medium length typed responses which will be marked based on the question complexity and the answer provided.

Responses to test questions will be assessed according to:

- use of appropriate anatomic and sonographic terminology and descriptors with correct spelling
- correctness, relevance and completeness of the response to the question asked
- the ability to accurately interpret sonographic images of lower body musculoskeletal structures and compose an appropriate and succinct response based on the learning from this unit.

You need to obtain a minimum score of 50% in this online test, in order to pass this unit.

**Referencing Style**

- [Vancouver](#)

**Submission**

Online

**Learning Outcomes Assessed**

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

**Graduate Attributes**

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

## Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

### What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

### Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

### Where can I get assistance?

For academic advice and guidance, the [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