



MEDS20006 Advanced Musculoskeletal Ultrasound Lower Body

Term 3 - 2021

Profile information current as at 27/04/2024 06:18 am

All details in this unit profile for MEDS20006 have been officially approved by CQU University 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 3 - 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).

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 "Have your say" through Moodle.

Feedback

The feedback and draft process for the written assessment really aided my learning.

Recommendation

The draft process for the written assessment and subsequent in-depth feedback aided student learning.

Feedback from Student feedback "Have your say" through Moodle.

Feedback

The lectures were really well set out and heaps of additional resources were provided which helped my learning.

Recommendation

The way the lectures were set out and the additional resources provided allowed for a deeper understanding.

Feedback from Student feedback "Have your say" through Moodle.

Feedback

There was a lot of information provided in the 'additional resources' and there was pressure to go through it all.

Recommendation

Some students thought that they needed to engage with every additional resource provided, and that knowledge regarding these would be assessed in the final assessment. Hence such students felt there was pressure to highly familiarise themselves with all the additional content.

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: 1st (2007)

Authors: Stefano Bianchi, Carlo Martinoli

Springer-Verlag

Berlin Heidelberg , Germany

ISBN: 978-3-662-49964-1

Binding: Paperback

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)

Referencing Style

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

For further information, see the Assessment Tasks.

Teaching Contacts

Michelle Fenech Unit Coordinator

m.fenech@cqu.edu.au

Schedule

Week 1 Revision of fundamentals of MSK ultrasound - 08 Nov 2021

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Advanced MSK ultrasound - Lower body, revision of fundamentals of MSK ultrasound and 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 and refresh your understanding. Lectures are also available to supplement this reading and unpack the assessment tasks for this unit.	Tutorial 1: Monday 8th November 2021 7 - 7:30 pm (AEST/QLD time) via Zoom.

Week 2 The abdominal wall and muscles of the pelvis - 15 Nov 2021

Module/Topic	Chapter	Events and Submissions/Topic
Sonographic assessment of the muscles of the abdominal wall and pelvic region.	Lectures are provided to revise the anatomy and sonographic assessment of this region.	Tutorial 2: Monday 15th November 2021 7 - 7:30 pm (AEST/QLD time) via Zoom.

Week 3 The groin - 22 Nov 2021

Module/Topic	Chapter	Events and Submissions/Topic
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The groin and inguinal regions. Chapter 12 and lectures are available. Tutorial 3: Monday 22nd November, 2021 7 - 7:30 pm (AEST/QLD time) via Zoom.

Week 4 The hip, buttocks and adductor origins. - 29 Nov 2021

Module/Topic	Chapter	Events and Submissions/Topic
Hip, buttocks (superficial and deep gluteal compartments) and adductor origins.	Chapter 12 and lectures are available.	

Vacation Week between weeks 4 and 5. - 06 Dec 2021

Module/Topic	Chapter	Events and Submissions/Topic
No content delivered this week.		

Week 5 Posterior thigh and hamstring muscle group - 13 Dec 2021

Module/Topic	Chapter	Events and Submissions/Topic
Posterior thigh including hamstring muscle group.	Chapter 13 of text and lectures are available.	Tutorial 4: Monday 13th December 2021 7 - 7:30 pm (AEST/QLD time) via Zoom.

Week 6 Anterior and medial thigh - 20 Dec 2021

Module/Topic	Chapter	Events and Submissions/Topic
Anterior and medial thigh.	Chapter 13 from text and lectures are available.	

Vacation Week - 27 Dec 2021

Module/Topic	Chapter	Events and Submissions/Topic
No content delivered this week.		

Week 7 The Knee - 03 Jan 2022

Module/Topic	Chapter	Events and Submissions/Topic
The knee	Chapter 12 and lectures are available.	

Week 8 The calf - 10 Jan 2022

Module/Topic	Chapter	Events and Submissions/Topic
The calf	Chapter 15 and lectures are available.	

Week 9 The ankle - 17 Jan 2022

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

Week 10 The foot - 24 Jan 2022

Module/Topic	Chapter	Events and Submissions/Topic
The foot	Chapter 17 and lectures are available.	Tutorial 5: Monday 24th January 2022 7 - 7:30 pm (AEST/QLD time) via Zoom.

Week 11 Interventional techniques and revision - 31 Jan 2022

Module/Topic	Chapter	Events and Submissions/Topic
Interventional techniques	Chapter 18.	Tutorial 6: Monday 31st January 2022 7 - 7:30 pm (AEST/QLD time) via Zoom.

Week 12 Revision and online test. - 07 Feb 2022

Module/Topic	Chapter	Events and Submissions/Topic
Revision and online test		

Exam Week - 14 Feb 2022

Module/Topic	Chapter	Events and Submissions/Topic

E-Poster Due: Exam Week Monday
(14 Feb 2022) 11:59 pm AEST
Online test Due: Exam Week
Thursday (17 Feb 2022) 11:59 pm
AEST

Term Specific Information

Your unit coordinator for this unit in term 3, 2021 is Dr Michelle Fenech. You can contact her via email:
m.fenech@cqu.edu.au

As this unit is delivered over term 3, there will be some weeks of self-directed learning due to the Christmas break. The assessments for this unit are due at the end of the term, to allow you to be flexible with your learning over this term.

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 and can enhance the current body of knowledge of the sonographic profession.

The e-poster will:

Be developed using power-point slides and written at a level suitable for presentation to an audience of peer fellow sonographers/medical/allied health professionals.

You will be required to conduct a literature search to aid the development of a refined research question.

You will need to undertake a literature review involving **critical analysis and synthesis of information and identification of knowledge gaps.**

A **research question and answer relating to a refined advanced musculoskeletal lower body topic**, must be clearly articulated in the poster, including the **provision of a concise and memorable 'take home' message.**

Your e-poster, as it is limited in words, needs to be clear, concise, cohesive and coherent and demonstrate an **in-depth understanding of your chosen topic.**

You must demonstrate a high level of communication skills using appropriate scientific and discipline specific language suitable for your selected audience.

The **poster should be engaging and use of figures (images or diagrams) to enhance reader comprehension. Figures/tables/diagrams must be original, or proof of permission to re-use must be provided.**

The e-poster will contain:

A title slide which contains the title of presentation, your name, current workplace, qualifications and your intended audience

An unstructured abstract slide

Up to 8 slides for the body of the e-poster which must include an introduction, body and conclusion.

And finally 1 final slide at the end for references.

This therefore allows for a total of maximum 11 power point slides in 'landscape' format.

Assessment Due Date

Exam Week Monday (14 Feb 2022) 11:59 pm AEST

Return Date to Students

Weighting

50%

Minimum mark or grade

50%

Assessment Criteria

Your e-poster will be assessed on:

1. The **academic writing style** used. The e-poster should be organised, logical, cohesive 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 and language appropriate for your selected target audience.

2. The **content** of e-poster including a **clear purpose** relevant to the discipline **which can guide or enhance current or future clinical practice based on evidence from relevant studies**. Gaps in knowledge should 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. The **suitability of the topic** to share with fellow health professionals that use **advanced lower body musculoskeletal ultrasound**. The choice of topic, and how a question was developed and answered must also be well demonstrated.

4. Referencing and the **use of quality evidence based studies and resources**. 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 and will be comprised of 10 questions (worth 10 marks each) which will require you to provide typed written answers.

The test will open for one week, and you will need to ensure that you complete the test during the week it is open.

The test will be open for 90 minutes (1.5 hours) allowing nine (9) minutes per question with only one attempt of the test allowed. You will need to allocate a continuous 90 minute period during the time when the test is open, to allow the test to be completed and you will need to ensure you 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.

Test questions may include image viewing questions which will require you to accurately identify and interpret sonographic images of lower body musculoskeletal structures, determine if images appear normal or a pathology or injury is demonstrated and justify your response using appropriate sonographic terminology. You may be asked how a sonographic examination could be extended to further inform the diagnosis.

The online test is to be undertaken and completed as an individual. Once the test is commenced, it cannot be paused, stopped or re-started and once completed, cannot be re-taken.

Assessment Due Date

Exam Week Thursday (17 Feb 2022) 11:59 pm AEST

Return Date to Students

Weighting

50%

Minimum mark or grade

50%

Assessment Criteria

Medium length typed responses to demonstrate a depth of understanding are required and answers will be marked based on the question complexity and the depth of answer provided.

Responses to test questions will be assessed according to:

- use of appropriate anatomic, pathologic and sonographic/radiologic terminology and descriptors with correct spelling
- correctness, relevance and completeness of the response to the question asked, and depth of understanding demonstrated
- 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.

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