



MEDS12002 *Abdominal Ultrasound*

Term 1 - 2019

Profile information current as at 12/05/2024 10:39 pm

All details in this unit profile for MEDS12002 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 explores the sonographic assessment of normal and pathological abdominal structures. Lectures and interactive tutorials, incorporating clinical narratives, are used to lay the foundations for you to analyse clinical scenarios. These scenarios are used to engage you in the sonographic decision-making process which culminates in the creation of a sonographers' interpretive report, including research into related sonographic pathologies.

Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Prerequisite MEDS11001 Fundamentals of Sonographic Practice AND Prerequisite MEDS11002 Relational Anatomy and Image Recognition AND Corequisite MEDS12001 Physics of Ultrasound

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

- Brisbane
- Mackay
- Melbourne
- Perth
- Sydney

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 Undergraduate 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: 40%

2. **Examination**

Weighting: 60%

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

The number of assessment items were manageable and conducive to student learning.

Recommendation

Maintain the same assessment style and work load.

Feedback from Student feedback

Feedback

Students embraced and enjoyed the challenge of this theoretically heavy medical sonography unit.

Recommendation

Continue to nurture student needs and requests regarding the delivery of Abdominal Ultrasound.

Unit Learning Outcomes

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

1. Describe anatomical structures on sonographic images of the abdomen
2. Differentiate the clinical appearance, sonographic appearance and aetiology of abdominal pathologies
3. Classify laboratory data relevant to the abdomen
4. Analyse clinical scenarios to provide a pathological differential diagnosis and produce a sonographic report.

The learning outcomes for this unit relate to the requirements of the Australasian Sonographer's Association Competency Standards for the Entry Level Sonographer.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
1 - Written Assessment - 40%	•	•	•	•
2 - Examination - 60%	•	•	•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4
1 - Communication	•	•	•	•

Graduate Attributes	Learning Outcomes			
	1	2	3	4
2 - Problem Solving	•	•	•	•
3 - Critical Thinking				•
4 - Information Literacy	•	•	•	•
5 - Team Work				
6 - Information Technology Competence				
7 - Cross Cultural Competence				
8 - Ethical practice				
9 - Social Innovation				
10 - 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	9	10
1 - Written Assessment - 40%	•	•	•	•						
2 - Examination - 60%	•	•		•						

Textbooks and Resources

Textbooks

MEDS12002

Prescribed

Diagnostic Medical Sonography: Abdomen and Superficial Structures

4th Edition (2017)

Authors: Diane M. Kawamura & Tanya D. Nolan

Lippincott Williams & Wilkins

Philadelphia , Pennsylvan , U.S.A.

ISBN: 9781496354921

Binding: Hardcover

MEDS12002

Supplementary

Sonography Exam Review: Physics, Abdomen, Obstetrics and Gynecology

2nd Edition (2013)

Authors: Susanna Ovel

Elsevier

St Louis , Missouri , U.S.A.

ISBN: 9780323100465

Binding: Hardcover

MEDS12002

Supplementary

Workbook for Diagnostic Medical Sonography: A Guide to Clinical Practice, Abdomen and Superficial Structures

4th Edition (2017)

Authors: Diane M. Kawamura & Tanya D. Nolan

Lippincott Williams & Wilkins

Philadelphia , Pennsylvan , U.S.A.

ISBN: 9781496380579

Binding: Hardcover

Additional Textbook Information

Diagnostic Medical Sonography text and workbook are available in a value pack at a reduced cost to students.

All books can be purchased at the CQUni Bookshop here: <http://bookshop.cqu.edu.au> (search on the Unit code)

[View textbooks at the CQUniversity Bookshop](#)

IT Resources

You will need access to the following IT resources:

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

Referencing Style

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

For further information, see the Assessment Tasks.

Teaching Contacts

Sharon Meng Unit Coordinator

s.meng@cqu.edu.au

Jane Wardle Unit Coordinator

j.wardle@cqu.edu.au

Schedule

Week 1 - 11 Mar 2019

Module/Topic	Chapter	Events and Submissions/Topic
Pancreas	<ul style="list-style-type: none"> Chapter 7: 3rd Ed: p 207-221 Abdomen & Superficial Structures Chapter 7: 4th Ed: p 213-227 Abdomen & Superficial Structures Chapter 9: p 123-135 Sonography Exam Review 	<ul style="list-style-type: none"> Zoom Collaborate Session: Tuesday 10.30am (AEST) Overview & Introduction to Abdominal Ultrasound

Week 2 - 18 Mar 2019

Module/Topic	Chapter	Events and Submissions/Topic
Abdominal Vascular Structures	<ul style="list-style-type: none"> Chapter 4: 3rd Ed: p 57-77, 86-96 Abdomen & Superficial Structures Chapter 4: 4th Ed: p 59-79, 87-97 Abdomen & Superficial Structures Chapter 13: p 184-198 Sonography Exam Review 	

Week 3 - 25 Mar 2019

Module/Topic	Chapter	Events and Submissions/Topic
Gallbladder & Biliary System	<ul style="list-style-type: none"> Chapter 6: 3rd Ed: p 165-203 Abdomen & Superficial Structures Chapter 6: 4th Ed: p 171-209 Abdomen & Superficial Structures Chapter 8: p 105-122 Sonography Exam Review 	<ul style="list-style-type: none"> Zoom Collaborate Session: Tuesday 10.30am (AEST) Worksheet Completion & Abdominal Aortic Aneurysm (AAA) Case Study

Week 4 - 01 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
Liver	<ul style="list-style-type: none"> Chapter 5: 3rd Ed: p 101-162 Abdomen & Superficial Structures Chapter 5: 4th Ed: p 101-169 Abdomen & Superficial Structures Chapter 7: p 86-104 Sonography Exam Review 	

Week 5 - 08 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
Abdominal Wall & Diaphragm Peritoneal Cavity	<ul style="list-style-type: none"> Chapter 2: 3rd Ed: p 13-37 Abdomen & Superficial Structures Chapter 3: 3rd Ed: p 39-55 Abdomen & Superficial Structures Chapter 2: 4th Ed: p 13-39 Abdomen & Superficial Structures Chapter 3: 4th Ed: p 41-57 Abdomen & Superficial Structures Chapter 15: p 218-221 Sonography Exam Review Chapter 18: p 259-264 Sonography Exam Review 	<ul style="list-style-type: none"> Zoom Collaborate Session: Tuesday 10.30am (AEST) Worksheet Completion & Liver Case Study

Vacation Week - 15 Apr 2019

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

Week 6 - 22 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
Kidneys	<ul style="list-style-type: none"> • Chapter 10: 3rd Ed: p 265-337 Abdomen & Superficial Structures • Chapter 10: 4th Ed: p 271-333 Abdomen & Superficial Structures • Chapter 10: p 136-146 Sonography Exam Review • (Omitting vascular disorders of the kidneys) 	

Week 7 - 29 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
Lower Urinary System	<ul style="list-style-type: none"> • Chapter 11: 3rd Ed: p 341-365 Abdomen & Superficial Structures • Chapter 11: 4th Ed: p 335-356 Abdomen & Superficial Structures • Chapter 10: p 148-149 Sonography Exam Review 	<ul style="list-style-type: none"> • Zoom Collaborate Session: Tuesday 10.30am (AEST) • Worksheet Completion & Renal Case Study

Week 8 - 06 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
Prostate	<ul style="list-style-type: none"> • Chapter 12: 3rd Ed: p 367-387 Abdomen & Superficial Structures • Chapter 12: 4th Ed: p 357-375 Abdomen & Superficial Structures • Chapter 16: p 229-238 Sonography Exam Review (Prostatic components only) 	<ul style="list-style-type: none"> • Written Assessment Due: Tuesday 7th May 9:00am (AEST) • Abdominal Pathological Brochure Due: Week 8 Tuesday (7 May 2019) 9:00 am AEST

Week 9 - 13 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
Adrenal Glands	<ul style="list-style-type: none"> • Chapter 13: 3rd Ed: p 389-416 Abdomen & Superficial Structures • Chapter 13: 4th Ed: p 377-402 Abdomen & Superficial Structures • Chapter 12: p 170-175 Sonography Exam Review 	

Week 10 - 20 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
Spleen	<ul style="list-style-type: none"> • Chapter 8: 3rd Ed: p 225-241 Abdomen & Superficial Structures • Chapter 8: 4th Ed: p 229-245 Abdomen & Superficial Structures • Chapter 11: p 158-169 Sonography Exam Review 	

Week 11 - 27 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
Gastrointestinal Tract	<ul style="list-style-type: none"> • Chapter 9: 3rd Ed: p 243-262 Abdomen & Superficial Structures • Chapter 9: 4th Ed: p 247-269 Abdomen & Superficial Structures • Chapter 14: p 199-211 Sonography Exam Review 	<ul style="list-style-type: none"> • Zoom Collaborate Session: Tuesday 10.30am (AEST) • Mock Examination (Revision)

Week 12 - 03 Jun 2019

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

Retroperitoneum	<ul style="list-style-type: none"> • Chapter 14: 3rd Ed: p 419-433 Abdomen & Superficial Structures • Chapter 14: 4th Ed: p 405-419 Abdomen & Superficial Structures • Chapter 12: p 170 & 175-183 Sonography Exam Review
------------------------	--

Review/Exam Week - 10 Jun 2019

Module/Topic	Chapter	Events and Submissions/Topic
Revision/Exam Week	<ul style="list-style-type: none"> • Abdomen Mock Exam: • Sonography Exam Review p 271 - 294 	

Exam Week - 17 Jun 2019

Module/Topic	Chapter	Events and Submissions/Topic
Exam Week		<ul style="list-style-type: none"> • End of Term Summative Examination (60%) • Note: A pass of 50% MUST be achieved in this examination to pass this course

Term Specific Information

Unit Coordinator Details:
 Welcome to MEDS12002 Abdominal Ultrasound, my name is Sharon Meng and I will be your 2019 unit coordinator. I am currently based at the Mackay, Ooralea Campus and am available for consultation by appointment on most days except when scheduled into sonographic laboratory sessions. My contact details are email: s.meng@cqu.edu.au and office telephone number is (07) 49407519. I am looking forward to the privilege of delivering our unit topic as you advance towards your sonographic qualification. I would like to wish you all the very best for your studies in the forthcoming term.

Unit Details
 MEDS12002 is a 6 credit point subject which is a prerequisite for MEDS12004 Sonographic Skills Development 1, which will be taken in term two of this teaching year. Teachings of 'Abdominal Ultrasound' will be heavily revisited throughout your studies and your knowledge will be relied upon to assist in passing future laboratory abdominal scanning practical assessments. As you progress through your clinical units, you will also benefit from revising content from the unit as a part of your critical thinking skills. I encourage you to carefully study the unit profile and to be active in the on-line discussion forums. It is recommended that you commit to 12.5 hours of study per week, therefore a total of 150 study hours upon completion of this unit.

This year's assessment task will be to complete an Abdominal Pathological Brochure to explore the realms of patient disease and to enrich your understanding of patient communication whilst carrying a weighting of 40% towards your final grade for this unit. The remaining 60% will consist of an end of term examination which will assess materials covered in lectures and tutorials. Practice online quizzes have also been incorporated to assist in your learning journey.

Zoom Collaborate Tutorials
 On-line Zoom Collaborate tutorials will be conducted (see Moodle schedule for times and dates) throughout the term and will be recorded for future revision. Case study scenarios will be used to facilitate sonographic worksheet completion to consolidate 'Abdominal Ultrasound' unit teachings. All tutorial concepts will be considered as end of term examinable material. Zoom will be the software of choice for tutorial delivery. Please ensure that you are proficient in the use of this technological platform. MEDS12002 bears a heavy theoretical workload, therefore it is imperative that you are vigilant with your study commitments.

I certainly look forward to the privilege of delivering our unit topic again this year.

Assessment Tasks

1 Abdominal Pathological Brochure

Assessment Type

Written Assessment

Task Description

Context: Part of a Sonographer's day to day activities, is to provide an accurate and clear explanation of their sonographic findings. It is an important skill for a health professional to be able to provide clinical findings in a brief and concise manner. One of the best ways to provide easy to read information about pathologies is through the use of a brochure.

Task: Your assessment task is to create a Tri-fold, 6 panel digital only brochure. You will be provided with a list of abdominal pathologies sourced from your unit content. You are required to select only 'one' to form the basis of your assessment task. The brochure is to be written to a peer audience, making clear use of medical terminology. The brochure must emphasise the sonographic modality in the imaging process of your selected pathological topic. The brochure is to be used as an educational tool to inform a peer audience about a particular disease process and to raise awareness of the use of the ultrasound modality towards a diagnosis. A template and exemplar will be provided with details of the information to be included in your brochure. The brochure will be completed in electronic/digital format and submitted via the unit Moodle site.

Word Length: There is no set word length, however wording must be of a readable size and font and fit into an electronic tri-fold, 6 panel digital only template.

This assessment will assist you in developing the necessary skills to describe aetiology of diseases and diagnostic processes, using medical terminology. This task will give you the opportunity to develop techniques in prioritising information for inclusion and the use of clear concise writing skills necessary for a sonographic occupation. Creating this brochure will involve researching relevant information from recent resources including up to date scientific journal articles. This assessment item requires you to be creative in design so that the information is engaging to the reader.

Assessment Due Date

Week 8 Tuesday (7 May 2019) 9:00 am AEST

Submission is required via CQU Moodle site upload

Return Date to Students

Week 10 Tuesday (21 May 2019)

Written assessment will be returned within 2 weeks of the due date as per CQU protocol.

Weighting

40%

Minimum mark or grade

Minimum grade required is 50%.

Assessment Criteria

- Evidence based information
- Grammar & punctuation
- Readability
- Aesthetic appearance
- Audience suitability
- Image inclusions
- Recent referencing

You **MUST** achieve a minimum grading of **50%** in this assessment to pass this unit.

Referencing Style

- [Vancouver](#)

Submission

Online

Submission Instructions

Submission via online moodle upload, brochure to be a 6 panel, tri-fold style only.

Learning Outcomes Assessed

- Describe anatomical structures on sonographic images of the abdomen
- Differentiate the clinical appearance, sonographic appearance and aetiology of abdominal pathologies
- Classify laboratory data relevant to the abdomen
- Analyse clinical scenarios to provide a pathological differential diagnosis and produce a sonographic report.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy

Examination

Outline

Complete an invigilated examination.

Date

During the examination period at a CQUniversity examination centre.

Weighting

60%

Length

120 minutes

Minimum mark or grade

50% must be attained.

Exam Conditions

Closed Book.

Materials

Dictionary - non-electronic, concise, direct translation only (dictionary must not contain any notes or comments).

No calculators permitted

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