



MEDS12002 *Abdominal Ultrasound*

Term 1 - 2017

Profile information current as at 12/05/2024 08:40 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 OR MEDS11003 Relational Anatomy 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 - 2017

- Brisbane
- Mackay
- Melbourne
- 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 Self Reflection: MEDS12002 Abdominal Ultrasound is a positively evolving subject in the Medical Ultrasound undergraduate course that I feel, will evolve further with future deliveries.

Feedback

Positive comments on unit structure and engagement were received.

Recommendation

Course coordinated tutorial sessions **MUST** be continued, to allow the student / course coordinator interaction to occur.

Minor adjustments of assessment structure and guidelines will be made available to the 2017 student body.

Incorporation of anatomical software - Draw-it-to-Know-it, must be made available to the Abdominal Ultrasound student body, to allow for appropriate revision of prerequisite anatomical concepts.

Action

All zoom collaborate sessions were undertaken by myself (unit coordinator). I feel that students appreciated time with their lecturer and the chance to converse openly in a direct forum. Draw-it-to-know-it was successfully implemented and highly revered by the student body for revisionary purposes.

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 pathological processes.
3. Classify laboratory data relevant to the abdomen.
4. Analyse clinical scenarios to provide a differential diagnosis and produce a sonographic report.

The learning outcomes for this unit relate to the requirements of the Australian Sonographers 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	•	•	•	•
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

Edition: 3rd (2012)

Authors: Diane Kawamura & Bridgette Lunsford

Lippincott Williams and Wilkins

Philadelphia , PA , USA

ISBN: 9781469805184

Binding: Hardcover

MEDS12002

Prescribed

Sonography Exam Review: Physics, Abdomen, Obstetrics and Gynecology

2nd Edition (2014)

Authors: Susanna Ovel

Elsevier

Sacramento , California , United States

ISBN: 978-0-323-10046-5

Binding: Paperback

Additional Textbook Information

"Diagnostic Medical Sonography: Abdomen & Superficial Structures," will be used as the prescribed text for two courses this term - MEDS12002 Abdominal Ultrasound and MEDS12003 Superficial Structures in Ultrasound.

This book comes packaged with the workbook at a reduced cost to students.

"Sonography Exam Review," includes a mobile app with interactive flash cards, mobile app for quick quizzes, timed mock exams and two interactive sonographical interactive memory games.

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

For further information, see the Assessment Tasks.

Teaching Contacts

Sharon Meng Unit Coordinator

s.meng@cqu.edu.au

Schedule

Week 1 - 06 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
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Pancreas	<ul style="list-style-type: none"> • Chapter 7: p 207-221 Abdomen & Superficial Structures • Chapter 9: p 123-135 Sonography Exam Review
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Week 2 - 13 Mar 2017

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

Week 3 - 20 Mar 2017

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

Week 4 - 27 Mar 2017

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

Week 5 - 03 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
Abdominal Wall & Diaphragm Peritoneal Cavity	<ul style="list-style-type: none"> • Chapter 2: p 13-37 Abdomen & Superficial Structures • Chapter 3: p 39-55 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: Monday 10.30am (AEST) • Basic Worksheet Completion & Liver Case Study

Vacation Week - 10 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
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Week 6 - 17 Apr 2017

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

Week 7 - 24 Apr 2017

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

Week 8 - 01 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
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Prostate	<ul style="list-style-type: none"> • Chapter 12: p 367-387 Abdomen & Superficial Structures • Chapter 16: p 229-238 Sonography Exam Review (Prostatic components only)
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Week 9 - 08 May 2017

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

Week 10 - 15 May 2017

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

Week 11 - 22 May 2017

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

Week 12 - 29 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Retroperitoneum	<ul style="list-style-type: none"> • Chapter 14: p 419-433 Abdomen & Superficial Structures • Chapter 12: p 170 & 175-183 Sonography Exam Review 	

Review/Exam Week - 05 Jun 2017

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 - 12 Jun 2017

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

On-line Zoom Collaborate Tutorials

On-line zoom collaborate tutorials will be conducted (see Moodle schedule for times and dates) throughout the term to facilitate worksheet completion and case study scenarios which will in-turn, consolidate 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 the technologies required to access these tutorials and that your computer has the appropriate capabilities.

Unit Work

This is a 6 credit point subject which acts as a prerequisite for MEDS12004 Sonographic Skills Development 1 which will be taken in term two (2) of this teaching year. Teachings of, "Abdominal Ultrasound," will be heavily revisited and your knowledge relied upon, in your laboratory abdominal scanning curriculum. I encourage you to study the unit profile carefully and contribute to the on-line discussion forums, to initiate a rapport with fellow students. It is recommended that a commitment of 12.5 hours of study be conducted per week, making a total of 150 hours upon course completion.

This is a purely theoretical subject which bears a heavy theoretical workload, please ensure you are consistent with study commitments.

2016 saw the successful implementation of a new textbook, "Sonography Exam Review," which provides you with full study summaries of all anatomical, pathological and scanning concepts. One of the most valuable features of this review resource is the inclusion of the accompanying mock exams and student Evolve Website. The electronic rationales provide immediate feedback and questions which can be bookmarked for later reference. Also contained on the Evolve Website, students can find two entertaining review games, "Sonography Millionaire," and "Tournament of Sonography," which makes studying not only more interactive but a lot more enjoyable. Please also familiarise yourself with the electronic resources and accompanying workbook for the set text, "Diagnostic Medical Sonography - Abdomen & Superficial Structures." Resources for students include: weblinks, glossary with pronunciations, answers to book questions, quiz bank tests and video clips.

This year the assessment item has been simplified to a single task: A pathological brochure, to provide a more directive and less wordy style of assessment task. 2016 saw major unit improvements performed to increase overall student satisfaction. 2014 saw the Sonographic Review Team eliminate examinable online quizzes to allow students more time to concentrate on their end of term examination. Quizzes are still provided on-line for revisionary purposes only. Central Queensland University also discourages the use of (MCQ's) Multiple Choice Questions on end of term examinations, so this style of assessment has been replaced.

I look forward to the privilege of delivering our unit topic, as you advance towards your sonographic qualification.

Kind Regards

Sharon Meng

Assessment Tasks

1 Written Assessment

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 sonographical 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 to patients 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 course content, weeks 1-4. You are required to select only 'one' to form the basis of your assessment task. The brochure is to be written for a patient audience and must emphasise the use of sonography in the diagnostic process.

The brochure is to be used as an educational tool to inform the general public about a particular disease process and to raise awareness of the use of ultrasound to assist in 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 course Moodle site.

This assessment will assist you to develop the skills to describe aetiology of diseases and diagnostic processes to your future patients, using terminology that is easy to understand. This task will give you the opportunity to develop skills in prioritising information for inclusion and the use of clear concise writing without technical jargon. Creating this brochure will involve researching relevant information and being creative in design so that the information is engaging to the reader.

Word Length: There is no word length, however must be presented in a readable font size for a brochure intended for patients.

Assessment Due Date

Submission is required via CQU Moodle site upload

Return Date to Students

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 50%

Assessment Criteria

Assessment criteria for the abdominal pathological brochure includes:

- Evidence based information
- Grammar & punctuation
- Readability
- Aesthetic appearance
- Image inclusions
- Referencing

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

Referencing Style

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

Submission

Online

Submission Instructions

Submission via online moodle upload, brochure to be 6 panel, trifold style only

Learning Outcomes Assessed

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

Exam Conditions

Closed Book.

Materials

No calculators permitted

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

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