



# MEDS13009 Obstetric and Paediatric Sonography

## Term 2 - 2022

Profile information current as at 29/04/2024 08:45 am

All details in this unit profile for MEDS13009 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 study of obstetric ultrasound from MEDS13001 to explore the sonographic assessment of normal and pathological third trimester obstetric cases. You will study the sonographic appearance, scanning techniques, management and pathological complications associated with third trimester scans as well as become familiar with investigations and interventions relevant to the management of post partum patients and prenatal anomalies of the fetus. You will also investigate sonographic studies relating to a paediatric patient. Common paediatric anomalies as well as inherent congenital diseases will be reviewed to include their sonographic appearance, safe scanning techniques, prognosis and treatment. Clinical scenarios/case studies are used to engage you in the sonographic decision-making process for both the third trimester scan and the paediatric patient.

### Details

Career Level: *Undergraduate*

Unit Level: *Level 3*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

Pre-requisite: MEDS13001 Obstetric and Breast Ultrasound and MEDS12007 Medical Sonography Clinical Unit 1

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 - 2022

- 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).

### 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. **Presentation and Written Assessment**

Weighting: 40%

#### 2. **Online Test**

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 Unit coordinator assessment and unit evaluation surveys

**Feedback**

Students valued the increased emphasis on image interpretation to improve critical thinking and clinical reasoning skills. The "Case of the Week" provided resources to allow these skills to develop in a format similar to the online test.

**Recommendation**

Continue to utilise a variety of formats to improve critical thinking and clinical reasoning skills.

#### Feedback from CQU success data, student communication, and unit evaluation surveys

**Feedback**

Students struggled to remain engaged with content and balance both academic and clinical learning whilst on clinical placement.

**Recommendation**

Remind students that they need to remain engaged with unit content whilst on clinical placement. Those students with regular engagement had improved rates of success.

## Unit Learning Outcomes

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

1. Describe safe ultrasound assessment of the fetus in late pregnancy, maternal post partum pelvis and the paediatric patient
2. Differentiate the aetiology, ultrasound appearance and Doppler haemodynamics of abnormalities in third trimester pregnancies and post partum patients
3. Analyse normal and abnormal paediatric ultrasound findings with reference to anatomy, clinical presentation, sonographic appearance, and aetiology
4. Critically evaluate and analyse clinical scenarios to communicate a differential diagnosis which includes ethical and management considerations.

Australasian Sonography Association Competency Standards for the Entry Level Sonographer Units: 1-5, 6, 10, 12

## Alignment of Learning Outcomes, Assessment and Graduate Attributes

 N/A Level	 Introductory Level	 Intermediate Level	 Graduate Level	 Professional Level	 Advanced Level
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### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
1 - Presentation and Written Assessment - 40%	•	•	•	•
2 - Online Test - 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 - Presentation and Written Assessment - 40%	•	•		•		•		•		
2 - Online Test - 60%	•	•	•				•	•		

## Textbooks and Resources

### Textbooks

MEDS13009

#### Supplementary

##### **Callen's Ultrasonography in Obstetrics and Gynecology**

Edition: 6th (2016)

Authors: Mary E Norton

Elsevier

ISBN: 0323328342

Binding: eBook

MEDS13009

#### Supplementary

##### **Pediatric Ultrasound E-Book: How, Why and When.**

Edition: 2nd (2010)

Authors: Darge, Kassa

Elsevier

ISBN: 9780080982489

Binding: eBook

#### Additional Textbook Information

Whilst there is no prescribed textbooks for this unit, some supplementary textbooks are listed which may provide additional resources for content covered. All required content will be delivered in lectures/tutorials.

### IT Resources

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

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Smart phone video access or desktop/laptop webcam with recording capabilities

## Referencing Style

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

For further information, see the Assessment Tasks.

## Teaching Contacts

**Paula Kinnane** Unit Coordinator

[p.kinnane@cqu.edu.au](mailto:p.kinnane@cqu.edu.au)

## Schedule

### Week 1 - 11 Jul 2022

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"><li>• Imaging the obese pregnant patient</li><li>• The post partum uterus</li><li>• Understanding the communication needs of all patients</li></ul>	Provided lecture content and readings	Tutorial- Monday 7.30pm AEST

### Week 2 - 18 Jul 2022

Module/Topic	Chapter	Events and Submissions/Topic
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- Interventional ultrasound in pregnancy and gynaecology
- Placental disorders

Provided lecture content and readings ALC tutorial 11am AEST

### Week 3 - 25 Jul 2022

Module/Topic	Chapter	Events and Submissions/Topic
• Growth disturbances in the fetus	Provided lecture content and readings	Tutorial- Monday 7.30pm AEST

### Week 4 - 01 Aug 2022

Module/Topic	Chapter	Events and Submissions/Topic
• Doppler use in obstetrics	Provided lecture content and readings	

### Week 5 - 08 Aug 2022

Module/Topic	Chapter	Events and Submissions/Topic
• Third trimester scan	Provided lecture content and readings	Tutorial- Monday 7.30pm AEST
		<b>Written assessment and recorded presentation</b> Due: Week 5 Friday (12 Aug 2022) 3:00 pm AEST

### Vacation Week - 15 Aug 2022

Module/Topic	Chapter	Events and Submissions/Topic
<b>Break week</b>		
• No new content		

### Week 6 - 22 Aug 2022

Module/Topic	Chapter	Events and Submissions/Topic
• Maternal complications	Provided lecture content and readings	

### Week 7 - 29 Aug 2022

Module/Topic	Chapter	Events and Submissions/Topic
• Introduction to paediatric ultrasound	Provided lecture content and readings	Tutorial- Monday 7.30pm AEST
• Neonatal head		

### Week 8 - 05 Sep 2022

Module/Topic	Chapter	Events and Submissions/Topic
• Paediatric spine	Provided lecture content and readings	

### Week 9 - 12 Sep 2022

Module/Topic	Chapter	Events and Submissions/Topic
• Paediatric hip	Provided lecture content and readings	Tutorial Monday 7.30pm AEST

### Week 10 - 19 Sep 2022

Module/Topic	Chapter	Events and Submissions/Topic
• Paediatric renal tract and adrenals	Provided lecture content and readings	

### Week 11 - 26 Sep 2022

Module/Topic	Chapter	Events and Submissions/Topic
• Paediatric gastrointestinal tract	Provided lecture content and readings	Tutorial- Monday 7.30pm AEST

### Week 12 - 03 Oct 2022

Module/Topic	Chapter	Events and Submissions/Topic
• No new content		<b>Online Test opens:</b> Thursday 6/10/22 at 3pm AEST
		<b>Online Test</b> Due: Week 12 Thursday (6 Oct 2022) 11:00 pm AEST

### Review/Exam Week - 10 Oct 2022

Module/Topic	Chapter	Events and Submissions/Topic
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## Term Specific Information

My name is Paula Kinnane, and I am the unit coordinator for MEDS13009. Following on from a background in radiography, I have been a qualified sonographer for over 20 years and worked in several environments (both specialised and general) in both public and private settings. Since 2006, I have been a specialist sonographer in women's and newborn imaging where I performed both routine and tertiary scans for gynaecological, breast and obstetrics imaging, including multiple pregnancies and fetal echocardiography. I have been employed at CQU since 2015. I am involved in various voluntary roles with the Australasian Sonographer's Association (ASA) and present at conferences. I was recently awarded a Fellowship by the ASA, in recognition of my achievements and service to the profession.

I am based on Brisbane campus and my contact details are:

email- p.kinnane@cqu.edu.au

Ph- 07 3023 4146

Please keep in mind that whilst I am full time, I do spend time in the labs.

I am usually very responsive by email and can coordinate meetings if necessary.

Whilst there is no set textbook for this unit, you will find textbook resources on your e-reading list on Moodle.

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 and attending tutorials
- Creating study notes to meet weekly learning objectives using lectures and readings
- Additional resources via the eReading list to supplement your learning
- Researching and working on your assessment
- Completing formative and mock test questions

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

Discussions about unit content and assessment are provided in the tutorials. Tutorials are held on Mondays at 7.30 pm AEST as per the above term schedule. The schedule is also available under the Virtual Classes tile on the Moodle site.

Many of you will be on clinical placement at some stage throughout this unit. There is an expectation that you will demonstrate good time management to successfully complete all aspects of your studies and remain engaged with content throughout the entire term.

## Assessment Tasks

### 1 Written assessment and recorded presentation

#### Assessment Type

Presentation and Written Assessment

#### Task Description

This written and recorded assessment will examine the sonographers' role in the detection and communication of important conditions in pregnancy and paediatrics.

This assessment item is designed to test your communication, problem solving and critical thinking skills with respect to literature searches, information collation and editing, image review, academic writing and referencing pertaining to your chosen condition.

#### Part A: Written

Your assessment task is to source, collate and edit relevant information pertaining to your choice of one (1) topic from the following:

- Preeclampsia in pregnancy, or
- Infantile hepatic haemangioma in the paediatric patient

Your discussion topics will depend on your chosen topic, but the following may help guide you:

- Background/overview e.g. Occurrence, risk factors, aetiology and/or pathogenesis
- Important clinical information e.g. relevant history and/or clinical tests
- Characteristic sonographic features

- How to sonographically evaluate these features and determine a sonographic diagnosis
- Compare with at least one differential diagnosis
- Further investigations and clinical management options

All submissions must be submitted as a Microsoft word document and must be uploaded through Turnitin.

Font style and size- Arial 11 or Times New Roman 12.

Line spacing-1.5 (body), single (references)

Maximum word limit is 1500 words (+/- 10%). Excludes tables, labelled figures, and references. Submissions outside this range will be penalised as per the marking rubric.

Max file size must not exceed 100MB.

**Part B: Recorded presentation**

You will prepare a short video presentation (up to 4 mins in length) on your chosen anomaly that will:

- Effectively communicate using an oral presentation, details of your chosen anomaly and its key specific sonographic features. The format should take the form of the ISBAR (Identify, Situation, Background, Assessment, Report/Recommendations) technique where you are presenting your findings to the consultant radiologist following the completion of your scan.
- This component entails producing a video recording utilising a smart phone, laptop or tablet device.
- This recording is to be uploaded to YouTube. The link to your YouTube recording is to be loaded in the comment section of your submission. Please ensure the visibility setting of your video is set to "unlisted"
- PowerPoint slides, images and worksheets are not required.

**Assessment Due Date**

Week 5 Friday (12 Aug 2022) 3:00 pm AEST

**Return Date to Students**

Week 6 Friday (26 Aug 2022)

**Weighting**

40%

**Minimum mark or grade**

50%

**Assessment Criteria**

**Part A: Written**

- Construct a paper to include an introduction, aim, body (with headings and subheadings) and a conclusion as minimum requirements. The submission should have a clear structure and defined purpose. It must be free of grammatical errors and reflect an appropriate level of critical analysis, clinical vocabulary, and scientific terminology.
- Evaluate current information and clinical consensus around the given topic by demonstrating thorough, relevant, and up to date literature searches to support the information that you provide.
- Describe the sonographic appearance and highlight the relevance of the sonographers' role in the diagnosis and management of your condition. It is expected that you will use referenced images, diagrams and/or tables to support your discussion.
- A reference list should be provided at the end of the submission in the correct format. Referencing must be done using CQU Vancouver style with a minimum of 10 scientific peer reviewed references. You must consistently use in text citations to support your analysis and discussion.

**Part B: Recorded presentation**

- Demonstrate creativity and decision making skills to appropriately construct a presentation that effectively communicates the pertinent information required using the ISBAR technique.
- Determine optimal video and audio settings so you are clearly visible, well heard and that the background/location is appropriate.
- Analyse and highlight content details that are relevant based on the literature review used in your written component.
- Interpret and select any additional information that will enhance your chosen condition scenario.
- Discern an effective methodology to ensure an appropriate format for your presentation.
- Display your understanding of the sonographer's role within this clinical setting scenario by constructing and delivering a presentation that is clinically relevant and follows ISBAR technique in a timely manner.

For more detailed marking criteria please see the marking rubric under the Assessment tile on the unit Moodle site.

## Referencing Style

- [Vancouver](#)

## Submission

Online

### Submission Instructions

Written assessment- Online Moodle submission. Presentation- paste YouTube link in the comments section on the Moodle page or at the bottom of your reference page. Ensure visibility settings of your video are set to "unlisted"

### Learning Outcomes Assessed

- Describe safe ultrasound assessment of the fetus in late pregnancy, maternal post partum pelvis and the paediatric patient
- Differentiate the aetiology, ultrasound appearance and Doppler haemodynamics of abnormalities in third trimester pregnancies and post partum patients
- Analyse normal and abnormal paediatric ultrasound findings with reference to anatomy, clinical presentation, sonographic appearance, and aetiology
- Critically evaluate and analyse clinical scenarios to communicate a differential diagnosis which includes ethical and management considerations.

### Graduate Attributes

- Communication
- Problem Solving
- Information Literacy
- Information Technology Competence
- Ethical practice

## 2 Online Test

### Assessment Type

Online Test

### Task Description

Each health profession possesses a body of knowledge, the fundamentals of which must be learnt and understood. The sonography profession has selected these concepts as relevant to your future scope of practice and you will build upon them in your future clinical capacity. You will complete an online test to assess your understanding of the concepts delivered in MEDS13009. The test can be accessed through the assessment tab on Moodle.

The test will open on Thursday 6/10/22 at 3pm (AEST) and close at 11pm (AEST)

It will comprise 10 questions which will require written answers. Students will need to note opening and closing times to complete the exam during this time period.

The test will be open for 100 mins (allowing 10 minutes per question) and only ONE attempt is allowed. Once started, the test cannot be paused or restarted

All unit content for MEDS13009 may be examined.

Questions will be drawn from a pool of questions to allow tests to be different for each student.

This assessment is to be undertaken as an individual. As with all other university assessment, colluding with other students on non group work tasks is considered academic misconduct, and may lead to action being taken. Inserting answers from other websites at the time of the online test without referencing the source is considered plagiarism.

### Assessment Due Date

Week 12 Thursday (6 Oct 2022) 11:00 pm AEST

Online test will close at 11pm (AEST). You must ensure you have completed the test by this time.

### Return Date to Students

Exam Week Thursday (20 Oct 2022)

### Weighting

60%

### Minimum mark or grade

50%

### Assessment Criteria

You will be allocated a 100 minute time period to complete the test.

Students will need to provide medium length typed responses to 10 online questions within the time period.

Film viewing questions may be included and you are required to be familiar with normal and pathological sonographic imaging of the areas discussed in MEDS13009.

Each question is worth 10 marks (giving a max total of 100 marks available)

Responses will be assessed according to:

- Use of appropriate terminology and descriptors as well as grammar, spelling, relevance of response and competence to correctly address all elements of the question.
- The students ability to correctly interpret sonographic images/graphs/tables and then to succinctly compose an appropriate response based on their learning from the unit.

### **Referencing Style**

- [Vancouver](#)

### **Submission**

Online

### **Submission Instructions**

The online test is accessed via the assessment tab in Moodle

### **Learning Outcomes Assessed**

- Describe safe ultrasound assessment of the fetus in late pregnancy, maternal post partum pelvis and the paediatric patient
- Differentiate the aetiology, ultrasound appearance and Doppler haemodynamics of abnormalities in third trimester pregnancies and post partum patients
- Analyse normal and abnormal paediatric ultrasound findings with reference to anatomy, clinical presentation, sonographic appearance, and aetiology
- Critically evaluate and analyse clinical scenarios to communicate a differential diagnosis which includes ethical and management considerations.

### **Graduate Attributes**

- Communication
- Problem Solving
- Critical Thinking
- Cross Cultural Competence
- Ethical practice

## 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