



# MEDS20018 *Advanced Obstetric Ultrasound*

## Term 2 - 2019

Profile information current as at 02/05/2024 09:25 pm

All details in this unit profile for MEDS20018 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 obstetric ultrasound. This unit will cover fetal structure, function, pathophysiology and scanning techniques at an advanced level as relevant to each trimester. You will develop your ability to make a clinical assessment, recognise fetal anomalies and disruptions to normal growth patterns. The legal and ethical considerations associated with the imaging and management of the pregnancy will be discussed.

### Details

Career Level: *Postgraduate*

Unit Level: *Level 9*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

There are no requisites for this unit.

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

### Offerings For Term 2 - 2019

- 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 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. **Portfolio**

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 Unit evaluation report

**Feedback**

Students requested more practise quiz questions to help prepare them for final online test

**Recommendation**

More worked examples and discussion will be incorporated to assist students preparation

#### Feedback from Unit evaluation report

**Feedback**

Students engaged well with content and felt it was beneficial to their learning experience

**Recommendation**

Continue to present content that reflects an advanced clinical level of obstetric sonography.

#### Feedback from Unit evaluation report

**Feedback**

Students enjoyed the assessment task and felt it was appropriate for this level of course

**Recommendation**

Maintain educational portfolio and presentation assessment task

## Unit Learning Outcomes

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

1. Evaluate normal and abnormal findings of fetal ultrasound and appraise the clinical relevance
2. Research the role of ultrasound in the clinical assessment, diagnosis and management of the obstetric patient, including communication, legal and ethical considerations
3. Apply at an advanced level clinical knowledge and critical thinking to fetal assessment

The Masters course does not lead to entry into the sonography profession but is rather studied by qualified practitioners to support advanced practice. Therefore it does not require external accreditation. The Master of Medical Ultrasound qualifies as a Continuing Professional Development (CPD) activity (activity code 10B - Australian Sonographers Accreditation Registry (ASAR)). This unit alone does not lead to the award of a qualification in specialist obstetric ultrasound.

## 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
1 - Portfolio - 50%	•	•	•
2 - Online Test - 50%	•		•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes		
	1	2	3
1 - Knowledge	○	○	○
2 - Communication	○	○	○
3 - Cognitive, technical and creative skills	○	○	○
4 - Research		○	
5 - Self-management		○	
6 - Ethical and Professional Responsibility		○	
7 - Leadership		○	
8 - 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
1 - Portfolio - 50%	○	○	○	○	○	○	○	
2 - Online Test - 50%	○	○	○					

## Textbooks and Resources

### Textbooks

MEDS20018

#### Prescribed

#### Callen's Ultrasonography in Obstetrics and Gynaecology

Edition: Sixth (2017)

Authors: Norton M.E, Scutt L.M, Feldstein V.A

Elsevier

Philadelphia , PA , USA

ISBN: 9780323328340

Binding: eBook

### 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)

**Ann Quinton** Unit Coordinator

[a.quinton@cqu.edu.au](mailto:a.quinton@cqu.edu.au)

## Schedule

### Week 1 1st trimester assessment- normal - 15 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"><li>• Normal 1st trimester assessment including intracranial translucency and Aqueduct of Sylvius</li></ul>	CALLEN'S Ultrasonography in Obstetrics and Gynaecology ISBN:9780323328340 Ch 1 pages 6-13 Ch 3 pages 63-67 Ch 5 pages 98-108	

### Week 2 1st trimester assessment- abnormal - 22 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"><li>• 1st trimester assessment- abnormal</li></ul>	Ch 3 pages 67-69 Ch 4 pages 88-94 Ch 5 pages 108-115	

### Week 3 Legal and ethical issues of pregnancy and breaking bad news - 29 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
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- Ethical and legal issues associated with pregnancy
  - Breaking bad news
- Ch 1 pages 18-22

#### **Week 4 2nd trimester assessment -normal - 05 Aug 2019**

Module/Topic	Chapter	Events and Submissions/Topic
• 2nd trimester assessment- normal and extended areas of study including: corpus callosum, palate, limb movement.	Ch 3 pages 69-77 Ch 6 pages 119-122 Ch 8 pages 214-216 Ch 10 pages 244-245	

#### **Week 5 2nd trimester assessment- abnormal - 12 Aug 2019**

Module/Topic	Chapter	Events and Submissions/Topic
• 2nd trimester assessment- abnormal by systems Head Face and Neck	Ch 9 pages 220-241 Ch 10 pages 243-268	

#### **Vacation Week - 19 Aug 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Break week- no content delivered.		

#### **Week 6 2nd trimester assessment- abnormal - 26 Aug 2019**

Module/Topic	Chapter	Events and Submissions/Topic
• 2nd trimester assessment- abnormal by systems MSK GIT/Abdominal wall Genitourinary	Ch 11 pages 272-325 Ch 14 pages 460-497 Ch 15 pages 503-534	

#### **Week 7 Cervix, placenta and umbilical cord - 02 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
• Cervix, placenta and umbilical cord	Ch 18 pages 653-670 Ch 19 pages 674-699	<b>Educational portfolio and presentation</b> Due: Week 7 Friday (6 Sept 2019) 5:00 pm AEST

#### **Week 8 Multiples - 09 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
• Twins and multiple pregnancies	Ch 7 pages 132-155	

#### **Week 9 Maternal complications - 16 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
• Maternal complications infections/disease teratogens nutritional disorders	Ch 16 pages 542-547, Ch 17 pages 633-650 Ch 2 pages 34-37, Ch 16 pages 548-551 Ch 25	

#### **Week 10 Fetal growth complications and Doppler assessment - 23 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
• Fetal growth complications • Doppler assessment	Ch 22 pages 733-747	

#### **Week 11 Genetics - 30 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
• Genetics and genetic testing	Ch 2 pages 24-52, Ch 3 pages 57-77	

#### **Online Test week - 07 Oct 2019**

Module/Topic	Chapter	Events and Submissions/Topic

No new content.

**Online test opens**  
Friday 11 October 9am AEST

### Review/Exam Week - 14 Oct 2019

Module/Topic	Chapter	Events and Submissions/Topic
		<b>Online test</b> Due: Review/Exam Week Friday (18 Oct 2019) 9:00 am AEST

### Exam Week - 21 Oct 2019

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

My name is Paula Kinnane and I will be unit co-ordinator for MEDS20018. Following on from a background in radiography, I have been a qualified sonographer for 19 years and worked in a number of environments (both specialised and general) in both public and private settings. Since 2009, I have been a specialist sonographer in women's and newborn imaging. Since 2015, I have worked at CQU and am looking forward to continuing the unit coordinator role for this subject for term 2.

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

Email: p.kinnane@cqu.edu.au or phone 07 3023 4146.

I may be in sonography labs, so may not be able to take all phone calls. I am usually very responsive by email and can coordinate meetings if necessary. I am unit coordinator for two subjects in term 2. Can you please specify your unit number and/or unit name in all correspondence.

This unit will require access to internet. Please ensure you have reliable connection for your online test.

Contributing presenters have been selected for their extensive knowledge and expert clinical practice and include:

**Associate Professor Ann Quinton.** Ann has worked clinically in fetal medicine units performing obstetric ultrasound and fetal echocardiography scans. She continues to work part-time clinically, performs research and lectures extensively nationally and internationally in the field of fetal ultrasound.

**Dr Gregory Duncombe.** Greg is a Fetal Medicine Specialist who works in both public and private settings and specialises in high risk pregnancy management. Greg has also completed a GradCertApp Law in Health law and was awarded Fellowship of the R.A.N.Z.C.O.G.

**Samantha Ward.** Samantha is a sonographer with extensive clinical knowledge in fetal ultrasound. She is the founder and author of "Obstetric Sonography" and has published articles and presented at numerous conferences.

**Donna Traves.** Donna is senior sonographer of Women's ultrasound at RBWH. Donna has a wealth of experience in Obstetrics and gynaecology and has presented at numerous conferences. Donna is involved in the training of sonographers and medical specialists at RBWH.

**Dr Narelle Kennedy.** Narelle recently completed her PhD researching ultrasound measured maternal abdominal fat thickness as a risk factor for adverse maternal and newborn outcomes and is the former chief sonographer at Nepean Hospital in Sydney. Narelle has extensive clinical experience in the field of obstetrics and gynaecology.

**Pauline McGrath.** Pauline is a senior genetic counsellor in the Fetal medicine Unit at RBWH. Pauline was awarded the Churchill Fellowship in 2013 and is a Fellow of the Human Genetics Society of Australasia.

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

This time includes:

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

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

Discussions about unit content, assessment and online test are provided in the tutorials. Tutorial schedule is available on unit Moodle site.

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

## Assessment Tasks

# 1 Educational portfolio and presentation

## Assessment Type

Portfolio

## Task Description

Advanced fetal anatomic assessment requires comprehensive knowledge and an understanding of clinical significance. Appropriate communication regarding findings to other health professionals is also an important clinical skill, and prioritisation of key concise relevant points is vital to presenting. This task will comprise of one (1) written case study and one (1) recorded mock presentation suitable for delivery at a conference with an audience of fellow sonographers/medical/allied health professionals.

Your submission will clearly discuss a case of a fetal anomaly and can be from the first, second or third trimester. Your submission must discuss a fetal anomaly you have either scanned yourself, been involved in, or sourced (source referenced). The same fetal anomaly will be used for your written anomaly case and recorded presentation.

Suggestions for discussion topics include:

- Background/overview e.g. Clinical presentation, occurrence, risk factors and aetiology.
- Description of the normal ultrasound appearance (brief)
- Describe the abnormal ultrasound finding comparing it to the normal findings and its significance
- Diagnostic criteria and pitfalls
- Diagnosis and possible differentials
- Further prenatal investigations and prenatal clinical management options.
- Impact of diagnosis on fetus. Are there any legal or ethical considerations that need to be communicated?

The written component will:

- Contain images, figures, tables and/or diagrams to enhance the text. Images/figures/tables/diagrams can be sourced but must be properly referenced. All images must be deidentified.
- Adhere to word limit of 1500 words +/-10%.

Your presentation is to be recorded and loaded via Zoom. It will:

- Effectively communicate your chosen topic using audio and PowerPoint.
- Be at a level suitable for presentation at a conference with an audience of fellow sonographers/medical/allied health professionals.
- This component entails producing a video recording of up to 6 minutes duration, utilising a smart phone, laptop or tablet device.
- Title slide - contains the title of presentation, your name, student number and the conference chosen for your intended audience (1 slide)
- Background/overview- patient history, occurrence, risk factors. (2 slides)
- Diagnosis and imaging- this includes sonographic findings, differential diagnosis, patient management, other testing/follow-up and prognosis. (6 Slides)
- 1 slide for references.

Total of 10 slides maximum. All PowerPoint slides are to be used in 'landscape' format with no animations.

## Assessment Due Date

Week 7 Friday (6 Sept 2019) 5:00 pm AEST

## Return Date to Students

Week 9 Friday (20 Sept 2019)

## Weighting

50%

## Minimum mark or grade

50%

## Assessment Criteria

### Written:

- Demonstrate, analyse and critically reflect on current medical literature relevant to your selected fetal anomaly.
- Construct a high quality submission addressing the topic which has clear structure and purpose. It must be free



of grammatical error and reflect an appropriate level of critical analysis balancing discussion with the appropriate use of clinical and scientific terminology.

- Evaluate current information and clinical consensus around the given topic by demonstrating thorough, appropriate, and up to date literature searches to support the selected background information that you include.
- Describe the sonographic appearance and use appropriate images to support the demonstration of your understanding of the diagnosis and management of this anomaly.
- All text, images, diagrams and tables are correctly referenced and word limit (1500 words +/-10%) is adhered to. All images must be deidentified.

### **Presentation:**

- Demonstrate a high level of communication skills and appropriate scientific language to convey a clear and concise message.
- Determine optimal video and audio settings so that you are clearly visible, well heard and that the background/location appropriate for the sensitivity of the information being conveyed.
- Analyse and highlight content details that are relevant based on the chosen anomaly.
- Discern an effective and appropriate methodology as to the format your presentation will take.
- Display your understanding of the sonographer's role within this clinical setting scenario by constructing and delivering a presentation that is clinically relevant.
- All images are deidentified and tables/diagrams are correctly referenced. Time limit is adhered to (6 minutes).

For more detailed marking criteria please see the MARKING RUBRIC on the Moodle site for this unit which is available [HERE](#)

### **Referencing Style**

- [Vancouver](#)

### **Submission**

Online

### **Submission Instructions**

The Educational portfolio and presentation is accessed via the assessment tab in Moodle.

### **Learning Outcomes Assessed**

- Evaluate normal and abnormal findings of fetal ultrasound and appraise the clinical relevance
- Research the role of ultrasound in the clinical assessment, diagnosis and management of the obstetric patient, including communication, legal and ethical considerations
- Apply at an advanced level clinical knowledge and critical thinking to fetal assessment

### **Graduate Attributes**

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

## **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. You will complete an online test to assess your understanding of the concepts delivered in this unit. The test can be accessed through the assessment tab on Moodle. It will be open for one week during week 12. Students will need to provide medium length typed responses to 10 online questions within the 2 hour 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 MEDS20018. Students will need to note opening and closing times to complete the exam during this time period. The test will be open for 120 mins (allowing 12 minutes per question) and only ONE attempt is allowed. Once started, the test cannot be paused or restarted. Once completed, it cannot be retaken. As the test is online and open book, you will find it useful if you have produced your own notes and that you are familiar with the unit information. All unit content for MEDS20018 will be covered in this online test.

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**

Review/Exam Week Friday (18 Oct 2019) 9:00 am AEST

**Return Date to Students**

Exam Week Friday (25 Oct 2019)

Results will be available after collation of grades

**Weighting**

50%

**Minimum mark or grade**

50%

**Assessment Criteria**

The test will be open from Friday 11 October at 9am (Week 12). You will need to allocate a 120 minute time period during this time that the test is open to complete the test. Please note: The test will close on Friday 18 October at 9am. Once started, the test cannot be paused, stopped or re-started. Once you have completed the test, it cannot be retaken. 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 in addressing all elements of the question
- The students ability to appropriately 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**

- Evaluate normal and abnormal findings of fetal ultrasound and appraise the clinical relevance
- Apply at an advanced level clinical knowledge and critical thinking to fetal assessment

**Graduate Attributes**

- Knowledge
- Communication
- Cognitive, technical and creative skills

## 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