



BMSC13022 Relational Anatomy and Medical Imaging

Term 2 - 2024

Profile information current as at 29/07/2024 05:30 pm

All details in this unit profile for BMSC13022 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

In this unit, you will build upon your anatomical knowledge by examining the gross, topographical and relational anatomy of the human body. Additionally, you will gain a foundational understanding of medical imaging modalities and how they are applied in clinical scenarios. You will then apply your knowledge on human anatomy by reviewing the spatial characteristics of and relationship between anatomical structures, body planes, external and internal landmarks to interpret medical images at a foundational level. This unit will cover basic pattern and image recognition skills to enable you to identify normal anatomical structures and common pathologies on medical images, including cross-sectional images, acquired in multiple planes.

Details

Career Level: *Undergraduate*

Unit Level: *Level 3*

Credit Points: *12*

Student Contribution Band: *8*

Fraction of Full-Time Student Load: *0.25*

Pre-requisites or Co-requisites

Pre-requisites: BMSC11007, BMSC11008 and BMSC12007

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 - 2024

- Bundaberg
- Rockhampton

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 12-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 25 hours of study per week, making a total of 300 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. **In-class Test(s)**

Weighting: 35%

2. **Oral Examination**

Weighting: 30%

3. **In-class Test(s)**

Weighting: 35%

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](#).

Unit Learning Outcomes

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

1. Use clinical terminology to correctly identify and distinguish, the spatial orientation of, and relationship between, anatomical structures, body planes, external and internal landmarks
2. Understand the basic processes of image production and risks associated with each of the major diagnostic imaging modalities and when they are clinically indicated for use in investigating common pathologies
3. Use clinical terminology to correctly identify and articulate the appearance of normal anatomical structures and features on a range of imaging modalities
4. Use clinical terminology to correctly identify and articulate the appearance of common pathologies on a range of imaging modalities

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
1 - In-class Test(s) - 35%	•	•	•	•
2 - Oral Examination - 30%	•	•	•	•
3 - In-class Test(s) - 35%	•	•	•	•

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				

Textbooks and Resources

Textbooks

There are no required textbooks.

IT Resources

You will need access to the following IT resources:

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

Referencing Style

All submissions for this unit must use the referencing styles below:

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)
- [Vancouver](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Varuni Tennakoon Unit Coordinator
v.tennakoon@cqu.edu.au

Schedule

Week 1 - 08 Jul 2024

Module/Topic	Chapter	Events and Submissions/Topic
Scientific and clinical principals of medical imaging modalities	Peer reviewed article by Rawson and Pelletier, 2013	

Week 2 - 15 Jul 2024

Module/Topic	Chapter	Events and Submissions/Topic
Thorax 1	Chapter 3 Greys anatomy, Chapter 4 Abrhams and McMinn's and peer reviewed article uploaded by Boxt, 2005	

Week 3 - 22 Jul 2024

Module/Topic	Chapter	Events and Submissions/Topic
Thorax 2	Chapter 3 Greys anatomy, Chapter 4 Abrhams and McMinn's	

Week 4 - 29 Jul 2024

Module/Topic	Chapter	Events and Submissions/Topic
Abdomen 1	Chapter 4 Greys anatomy, Chapter 5 Abrhams and McMinn's	

Week 5 - 05 Aug 2024

Module/Topic	Chapter	Events and Submissions/Topic
Abdomen 2	Chapter 4 Greys anatomy, Chapter 5 Abrhams and McMinn's	

Vacation Week - 12 Aug 2024

Module/Topic	Chapter	Events and Submissions/Topic
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Week 6 - 19 Aug 2024

Module/Topic	Chapter	Events and Submissions/Topic
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Pelvis 1	Chapter 5 Greys anatomy, Chapters 5 and 6 Abrhams and McMinn's	Spotter exam 1 - day/date to be confirmed during this week
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Week 7 - 26 Aug 2024

Module/Topic	Chapter	Events and Submissions/Topic
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Pelvis 2	Chapter 5 Greys anatomy, Chapters 5 and 6 Abrhams and McMinn's	
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Week 8 - 02 Sep 2024

Module/Topic	Chapter	Events and Submissions/Topic
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Head	Chapter 8 Greys anatomy, Chapter 1 Abrhams and McMinn's	
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Week 9 - 09 Sep 2024

Module/Topic	Chapter	Events and Submissions/Topic
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Neck and spine	Chapters 2 and 8 Greys anatomy, Chapters 1 and 2 Abrhams and McMinn's	
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Week 10 - 16 Sep 2024

Module/Topic	Chapter	Events and Submissions/Topic
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Self directed revision and assessment		Viva exam - day/date to be confirmed during this week
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Week 11 - 23 Sep 2024

Module/Topic	Chapter	Events and Submissions/Topic
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Upper and lower limbs	Chapters 6 and 7 Greys anatomy, Chapters 3 and 6 Abrhams and McMinn's	
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Week 12 - 30 Sep 2024

Module/Topic	Chapter	Events and Submissions/Topic
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Self directed revision		
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Review/Exam Week - 07 Oct 2024

Module/Topic	Chapter	Events and Submissions/Topic
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Exam Week - 14 Oct 2024

Module/Topic	Chapter	Events and Submissions/Topic
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		Spotter exam 2 - day/date to be confirmed during this week
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Term Specific Information

The Unit coordinator will be updated closer to the start of Term 2 with content and an academic facilitating the tutorials in both campus locations. The placeholder Unit coordinator is Dr Andrew Fenning.

The following textbooks for this Unit should be sourced:

Prescribed

- ***Greys anatomy for students 4th edition Drake, Vogl and Mitchel Elsevier health sciences ISBN 9780323393041***
- ***McMinn and Abrahams clinical atlas of human anatomy 8th edition Abrahams, Spratt, Loukas and van Shoor Elsevier health sciences ISBN 9780702073328***

Supplementary

- ***Human sectional anatomy 4th edition Dixon, Bowden, Logan, Ellis Taylor and Francis ISBN (eBook) 9781315381527***

All lectures are pre-recorded and uploaded to Moodle in advance. There will be a one-three hour face-to-face tutorial held most weeks in the anatomy laboratory which students are expected to attend. It is also expected that prior to attending the weekly tutorials, students would have watched the pre-recorded lecture content, have completed the prescribed readings and if necessary, revised any content from the foundational anatomy and physiology units to support their studies. There are three assessments for this unit, all of which are completed and submitted in person.

Assessment Tasks

1 Spotter Exam 1

Assessment Type

In-class Test(s)

Task Description

This task will assess your knowledge and application of human anatomy, pathology and medical imaging in a practical setting. You will be required to individually work through a series of work stations. Each station will feature specimens (including models, bones and platinates) or images (including cadaveric images and those from diagnostic imaging modalities) and a series of related questions you will be required to answer. The questions are designed to assess your knowledge, critical application and interpretation of human anatomy, pathology and medical imaging. You will record your answers on an answer sheet, which will be provided upon entry to the examination area and it must be handed in immediately upon completion of the assessment task. There will be a predetermined period of time (approximately 90-120 seconds as a guide) you are allowed to spend at each station and a timer / buzzer will instruct you when to move onto the next station. There will be approximately 20 work stations you must complete with strategically placed rest stops along the circuit. You may use the rest stops to review your answers however you are unable to leave the rest stop or move around the assessment room. This is a closed book assessment, no textbooks or study notes will be permitted into the assessment room. All students are responsible for providing their own writing implements and are required to bring photo ID in order to be permitted into the assessment room.

Assessment Due Date

Week 6- TBC Scheduled laboratory booking to be updated

Return Date to Students

Week 9 Friday (13 Sept 2024)

Weighting

35%

Minimum mark or grade

50%

Assessment Criteria

Your responses for the spotter exam are scored according to the following criteria:

- Correctness, relevance and completeness of the response to the question asked
- Correct spelling and use of anatomical and clinical terminology

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)
- [Vancouver](#)

Submission

Offline

Learning Outcomes Assessed

- Use clinical terminology to correctly identify and distinguish, the spatial orientation of, and relationship between, anatomical structures, body planes, external and internal landmarks
- Understand the basic processes of image production and risks associated with each of the major diagnostic imaging modalities and when they are clinically indicated for use in investigating common pathologies
- Use clinical terminology to correctly identify and articulate the appearance of normal anatomical structures and features on a range of imaging modalities
- Use clinical terminology to correctly identify and articulate the appearance of common pathologies on a range of imaging modalities

2 Viva voce exam

Assessment Type

Oral Examination

Task Description

This task will assess your knowledge and application of human anatomy, pathology and medical imaging in a practical setting. You will be required to individually work through a series of stations. At each station an examiner will provide you with information and / or images (including cadaveric images and those from diagnostic imaging modalities). You are then required to verbally answer a series of questions relating to the information and / or images provided. The questions are designed to assess your knowledge, critical application and interpretation of human anatomy, pathology and medical imaging. As you verbally answer each question the examiner will assess your response and record a mark.

The examiner is not able to answer any subsequent questions you may have or assist you in providing a response, all information required to complete each station will be provided in writing at the start of the station. It is up to you to read and interpret the information and instructions provided and deliver a response. There will be a predetermined period of time (approximately 12-15 minutes as a guide) you are allowed to spend at each station and a timer / buzzer will instruct you when to move onto the next station. There will be 2 stations you must work through. This is a closed book assessment, no textbooks or study notes will be permitted into the assessment room. Whilst no written responses will be accepted, students are permitted to bring writing implements (black or blue pen and highlighter) into the assessment room and write on the paper containing information, instructions and questions. Paper containing the information, instructions and questions will not be released to students and is required to be left with the examiner as you exit the station. Any information you write on this paper is not examinable and you will not gain / loose marks for writing on it. You will be required to bring photo ID in order to be permitted into the assessment rooms.

Assessment Due Date

Week 10 - TBC Scheduled laboratory booking to be updated

Return Date to Students

Week 12 Friday (4 Oct 2024)

Weighting

30%

Minimum mark or grade

50%

Assessment Criteria

Your responses for the viva are scored according to the following criteria:

- Correctness, relevance and completeness of the response to the question asked
- Correct spelling and use of anatomical and clinical terminology

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)
- [Vancouver](#)

Submission

Offline

Learning Outcomes Assessed

- Use clinical terminology to correctly identify and distinguish, the spatial orientation of, and relationship between, anatomical structures, body planes, external and internal landmarks
- Understand the basic processes of image production and risks associated with each of the major diagnostic imaging modalities and when they are clinically indicated for use in investigating common pathologies
- Use clinical terminology to correctly identify and articulate the appearance of normal anatomical structures and features on a range of imaging modalities
- Use clinical terminology to correctly identify and articulate the appearance of common pathologies on a range of imaging modalities

3 Spotter Exam 2

Assessment Type

In-class Test(s)

Task Description

This task will assess your knowledge and application of human anatomy, pathology and medical imaging in a practical setting. You will be required to individually work through a series of work stations. Each station will feature specimens (including models, bones and platinates) or images (including cadaveric images and those from diagnostic imaging modalities) and a series of related questions you will be required to answer. The questions are designed to assess your knowledge, critical application and interpretation of human anatomy, pathology and medical imaging. You will record your answers on an answer sheet, which will be provided upon entry to the examination area and it must be handed in immediately upon completion of the assessment task. There will be a predetermined period of time (approximately 90-120 seconds as a guide) you are allowed to spend at each station and a timer / buzzer will instruct you when to move onto the next station. There will be approximately 20 work stations you must complete with strategically placed rest stops along the circuit. You may use the rest stops to review your answers however you are unable to leave the rest stop or move around the assessment room. This is a closed book assessment, no textbooks or study notes will be permitted into the assessment room. All students are responsible for providing their own writing implements and are required to bring photo ID in order to be permitted into the assessment room.

Assessment Due Date

Exam week - TBC Scheduled laboratory booking to be updated

Return Date to Students

Exam Week Monday (14 Oct 2024)

Certification of grades

Weighting

35%

Minimum mark or grade

50%

Assessment Criteria

Your responses for the spotter exam are scored according to the following criteria:

- Correctness, relevance and completeness of the response to the question asked
- Correct spelling and use of anatomical and clinical terminology

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)
- [Vancouver](#)

Submission

Offline

Learning Outcomes Assessed

- Use clinical terminology to correctly identify and distinguish, the spatial orientation of, and relationship between, anatomical structures, body planes, external and internal landmarks
- Understand the basic processes of image production and risks associated with each of the major diagnostic imaging modalities and when they are clinically indicated for use in investigating common pathologies
- Use clinical terminology to correctly identify and articulate the appearance of normal anatomical structures and features on a range of imaging modalities
- Use clinical terminology to correctly identify and articulate the appearance of common pathologies on a range of imaging modalities

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