

Profile information current as at 05/09/2024 02:41 pm

All details in this unit profile for BMSC14003 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 integrated pathology unit builds on the knowledge, skill, technical and cognitive ability developed during Integrated Pathology 1. You will evaluate laboratory-based information to diagnose complex infectious diseases through application of knowledge of multiple clinical disciplines within medical laboratory science. You will apply your advanced-level knowledge of clinical biochemistry, haematology, histopathology, transfusion science, immunology, molecular pathology and quality management to 'real life' clinical scenarios and complex case studies focused on infectious diseases. Use of case studies will integrate advanced-level knowledge of the aetiology, pathophysiology, and investigation of infectious diseases that significantly affect the morbidity, mortality and economics of healthcare. At residential school you will perform laboratory tests using advanced methodology and instrumentation. This will further develop your analytical, evaluative and communication skills.

Details

Career Level: Undergraduate

Unit Level: *Level 4* Credit Points: *12*

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.25

Pre-requisites or Co-requisites

Prerequisite: BMSC14001 Integrated Pathology 1 AND BMSC13009 Immunology OR BMSC13023 Applied Immunology AND BMSC13001 Advanced Haematology AND BMSC13002 Advanced Clinical Biochemistry AND BMSC13011 Immunohaematology AND BMSC13010 Pharmacology AND BMSC13003 Advanced Clinical Microbiology AND BMSC13016 Advanced Histopathology

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 <u>Assessment Policy and Procedure (Higher Education Coursework)</u>.

Offerings For Term 2 - 2024

- Mixed Mode
- 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. **Case Study** Weighting: 25%

2. Practical Assessment

Weighting: 35% 3. **Examination** Weighting: 40%

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 <u>University's Grades and Results Policy</u> for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the CQUniversity Policy site.

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the CQUniversity Policy site.

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from Student feedback and self reflection

Feedback

Updating the lectures

Recommendation

Consider refreshing content to maintain consistency between tutorials and lecture material

Feedback from Student feedback and self reflection

Feedback

Stress around invigilated exams

Recommendation

Explore offering additional support through informative and informal feedback sessions prior to invigilated exam.

Unit Learning Outcomes

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

- 1. Differentiate the aetiology, pathophysiology and clinical investigation of complex medical conditions with a focus on infectious disease
- 2. Perform medical laboratory tests demonstrating advanced methodology and instrumentation
- 3. Evaluate pathological mechanisms and analytical techniques in the laboratory-based diagnosis of infectious disease
- 4. Evaluate data and present information concerning pathological issues in an ethical and scientific context.

The learning outcomes achieved are linked to the objectives of the accrediting body, Australian Institute of Medical Scientists (AIMS).

Alignment of Learning Outcomes, Assessment and Graduate Attributes							
N/A Level Introductory Level Graduate Level Advanced Level Advanced							
Alignment of Assessment Tasks to Learning Outcomes							
Assessment Tasks	Learning Outcomes						
	1	2	2	3	4		
1 - Case Study - 25%	•			•	•		
2 - Practical Assessment - 35%		•	•	•			
3 - Examination - 40%	•				•		
Alignment of Graduate Attributes to Learning Outcomes Graduate Attributes Learning Outcomes							
		1	2	3	4		
1 Communication							
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)
- Zoom (both microphone and webcam capability)

Referencing Style

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

- Harvard (author-date)
- Vancouver

For further information, see the Assessment Tasks.

Teaching Contacts

William Deasy Unit Coordinator

w.deasy@cqu.edu.au

Schedule

Week 1 - 08 Jul 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Cholera	A weekly reading list will be provided on the Moodle page.	Overview tutorial
Week 2 - 15 Jul 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Staphylococcal toxic shock syndrome	A weekly reading list will be provided on the Moodle page.	Tutorial covering Week 1
Week 3 - 22 Jul 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Post Streptococcal Glomerulonephritis (PSGN)	A weekly reading list will be provided on the Moodle page.	Tutorial covering Week 2
Week 4 - 29 Jul 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Systemic cryptococcosis	A weekly reading list will be provided on the Moodle page.	Tutorial covering Week 3
Week 5 - 05 Aug 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Malaria	A weekly reading list will be provided on the Moodle page.	Tutorial covering Week 4
Malaria		Tutorial covering Week 4

Vacation Week - 12 Aug 2024			
Module/Topic	Chapter	Events and Submissions/Topic	
No Lecture	N/A	N/A	
Week 6 - 19 Aug 2024			
Module/Topic	Chapter	Events and Submissions/Topic	
Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome (HIV/AIDS)	A weekly reading list will be provided on the Moodle page.	Residential School	
Week 7 - 26 Aug 2024			
Module/Topic	Chapter	Events and Submissions/Topic	
		Tutorial covering Week 6	
Coronavirus disease 2019 (COVID-19)	A weekly reading list will be provided on the Moodle page.	Residential School Practical Due: Week 7 Friday (30 Aug 2024) 5:00 pm AEST	
Week 8 - 02 Sep 2024			
Module/Topic	Chapter	Events and Submissions/Topic	
		Tutorial covering Week 7	
Disseminated strongyloidiasis	A weekly reading list will be provided on the Moodle page.	Laboratory Diagnostic Review Due: Week 8 Friday (6 Sept 2024) 5:00 pm AEST	
Week 9 - 09 Sep 2024			
Module/Topic	Chapter	Events and Submissions/Topic	
Filariasis	A weekly reading list will be provided on the Moodle page.	Tutorial covering Week 8	
Week 10 - 16 Sep 2024			
Module/Topic	Chapter	Events and Submissions/Topic	
Tuberculosis (TB)	A weekly reading list will be provided on the Moodle page.	Tutorial covering Week 9	
Week 11 - 23 Sep 2024			
Module/Topic	Chapter	Events and Submissions/Topic	
Revision	N/A	Tutorial covering Week 10	
Week 12 - 30 Sep 2024			
Module/Topic	Chapter	Events and Submissions/Topic	
Revision	N/A	N/A	
Review/Exam Week - 07 Oct 2024			
Module/Topic	Chapter	Events and Submissions/Topic	
Revision	N/A	N/A	
Exam Week - 14 Oct 2024			
Module/Topic	Chapter	Events and Submissions/Topic An invigilated examination will be scheduled during the allocated CQUniversity examination period. The exact date will be communicated once scheduled.	

Term Specific Information

Your unit coordinator for BMSC14003 is Dr William Deasy. You can contact me using the forum on the unit's Moodle site or alternatively through email (w.deasy@cqu.edu.au) or on 07 4930 6365. The forum for this unit is monitored and you can expect a response within 48 hours of posting your question.

Assessment Tasks

1 Laboratory Diagnostic Review

Assessment Type

Case Study

Task Description

Part A

You will choose a disease and describe in detail the various laboratory-based tests that are performed on a patient's sample when investigating the disease or monitoring management.

The disease may be one that we are studying in this unit or another disease if you wish.

Write a 2500-word essay, supported by up to ten (10) references outlining the advances in the understanding of the disease and the laboratory-based diagnosis.

Part B

Review and critique in detail two (2) scientific papers which have contributed to advanced knowledge associated with pathogenesis and diagnosis.

Your critical appraisal of a major scientific paper should include a summary of the outcomes of the described research, and how these findings were a significant advance in either pathogenesis/diagnosis.

What methodology was used and what further developments have occurred based on the original paper? The paper critique is expected to be concise, between 750 and 1000 words.

Assessment Due Date

Week 8 Friday (6 Sept 2024) 5:00 pm AEST

Submissions via Moodle

Return Date to Students

Week 10 Friday (20 Sept 2024)

Feedback will be provided on the Moodle page via Turnitin Feedback Studio

Weighting

25%

Minimum mark or grade

50%

Assessment Criteria

A total of 60 marks are available broken down as follows:

- 40 marks for Part A, the disease review.
- 20 marks for Part B, the scientific paper critiques (10 marks per paper).

A detailed marking rubric will be available on the Moodle site.

Student are permitted to use Generative AI for this assessment in the following ways:

- developing literature search strategies
- compiling suitable literature sources and locating data
- guidance for structuring the assignment

If Generative AI is used in any way, it must be cited as per the CQU Guidelines (Academic Learning Centre). If students choose to use generative AI, the following statement must be completed and included on the front page of the uploaded assessment: "I have used (insert technology) to (insert how you used this) in accordance with the requirements of this unit. The reason Lused this was to (explain why you used it). The details of how Lused it as (insert

requirements of this unit. The reason I used this was to (explain why you used it). The details of how I used it as (insert how). I hereby declare that the submission is an appropriate representation of my individual skills and abilities to meet the requirements of the task/s."

As per academic writing requirements and assessment criteria; citations of information should be of the primary source (i.e statistics returned by AI must be fact-checked and referenced from their original source as well as the AI source). Failure to cite primary sources as well as AI sources could be considered breach of academic integrity.

Your use of Generative AI must be clearly outlined in an appendix as a separate file which includes the prompt used and Generative AI response (in line with marking rubric). Failure to include an appendix may result in academic integrity investigation.

Referencing Style

- Harvard (author-date)
- <u>Vancouver</u>

Submission

Online

Submission Instructions

The documents are to be uploaded to Moodle.

Learning Outcomes Assessed

- Differentiate the aetiology, pathophysiology and clinical investigation of complex medical conditions with a focus on infectious disease
- Evaluate pathological mechanisms and analytical techniques in the laboratory-based diagnosis of infectious disease
- Evaluate data and present information concerning pathological issues in an ethical and scientific context.

2 Residential School Practical

Assessment Type

Practical Assessment

Task Description

The Residential School is an opportunity to learn and perform a range of interdisciplinary clinical diagnostic procedures and compliment the theoretical knowledge of integrated pathology.

The residential school will provide valuable practical experience in techniques currently performed in medical laboratories.

The laboratory practical tasks will comprise of laboratory-based exercises which will be completed during the four (4) day Residential School.

The exercises will be described in the laboratory workbook and will involve completion of laboratory exercises, calculation and presentation of results.

A detailed rubric of assessment criteria for laboratory manual will be available on the unit Moodle page.

Competed laboratory workbooks will be submitted via Moodle.

Assessment Due Date

Week 7 Friday (30 Aug 2024) 5:00 pm AEST

Laboratory Practical Workbook is to be uploaded to Moodle

Return Date to Students

Week 9 Friday (13 Sept 2024)

Feedback will be provided on Moodle

Weighting

35%

Minimum mark or grade

50%

Assessment Criteria

Assessment of the laboratory manual will be based on presentation of results of laboratory exercises including calculations, and answers to questions related to the cases studied.

Answers provided in the laboratory manual must be clearly presented and legible.

Referencing Style

- Harvard (author-date)
- Vancouver

Submission

Online

Submission Instructions

Laboratory Practical Workbook is to be uploaded to Moodle

Learning Outcomes Assessed

- Perform medical laboratory tests demonstrating advanced methodology and instrumentation
- Evaluate pathological mechanisms and analytical techniques in the laboratory-based diagnosis of infectious disease

Examination

Outline

Complete an invigilated examination.

Dato

During the examination period at a CQUniversity examination centre.

Weighting

40%

Length

180 minutes

Minimum mark or grade

50

Exam Conditions

Closed Book.

Materials

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 <u>Academic Learning Centre (ALC)</u> 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