

Profile information current as at 17/05/2024 06:08 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 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 Assessment Policy and Procedure (Higher Education Coursework).

# Offerings For Term 2 - 2020

- 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).

## Residential Schools

This unit has a Compulsory Residential School for distance mode students and the details are: Click here to see your <u>Residential School Timetable</u>.

# 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. **Online Test** 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 <u>CQUniversity Policy site</u>.

# **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 Introductory Intermediate Graduate Professional Advanced Level Level Level Alignment of Assessment Tasks to Learning Outcomes **Assessment Tasks Learning Outcomes** 1 2 3 1 - Case Study - 25% 2 - Practical Assessment - 35% 3 - Online Test - 40% 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

Graduate Attributes	Learning Outcomes							
				1		2	3	4
10 - Aboriginal and Torres Strait Islander Cultures								
Alignment of Assessment Tasks to Gradua								
Assessment Tasks	Graduate Attributes  1 2 3 4 5 6 7 8 9 10							
1 - Case Study - 25%	•	•	•	•		•	•	
2 - Practical Assessment - 35%	•	•	•	•		•		
3 - Online Test - 40%	•	•	•	•				

# 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 style: <u>Harvard (author-date)</u> For further information, see the Assessment Tasks.

# **Teaching Contacts**

Padraig Strappe Unit Coordinator p.strappe@cqu.edu.au

# Schedule

Week 1 - 13 Jul 2020		
Module/Topic	Chapter	<b>Events and Submissions/Topic</b>
Introduction	-	
Introduction		
Week 2 - 20 Jul 2020		
Module/Topic	Chapter	<b>Events and Submissions/Topic</b>
Tuberculosis 1		Recorded Lecture and Zoom Tutorial

Week 3 - 27 Jul 2020			
Module/Topic	Chapter	Events and Submissions/Topic	
Tuberculosis 2		Recorded Lecture and Zoom Tutorial	
Week 4 - 03 Aug 2020			
Module/Topic	Chapter	Events and Submissions/Topic	
Human Immunodeficiency Virus 1		Recorded Lecture and Zoom Tutorial	
Week 5 - 10 Aug 2020			
Module/Topic	Chapter	<b>Events and Submissions/Topic</b>	
Human Immunodeficiency Virus 2		Recorded Lecture and Zoom Tutorial	
- 17 Aug 2020			
Module/Topic	Chapter	<b>Events and Submissions/Topic</b>	
Vacation Week			
Week 6 - 24 Aug 2020			
Module/Topic	Chapter	<b>Events and Submissions/Topic</b>	
Cryptococcus neoformans 1		Recorded Lecture and Zoom Tutorial	
Week 7 - 31 Aug 2020			
Module/Topic	Chapter	<b>Events and Submissions/Topic</b>	
		Recorded Lecture and Zoom Tutorial	
Cryptococcus neoformans 2		<b>Laboratory Diagnostic Review</b> Due: Week 7 Monday (31 Aug 2020) 11:55 pm AEST	
Week 8 - 07 Sep 2020			
Module/Topic	Chapter	<b>Events and Submissions/Topic</b>	
Malaria 1		Recorded Lecture and Zoom Tutorial	
Week 9 - 14 Sep 2020			
Module/Topic	Chapter	<b>Events and Submissions/Topic</b>	
Malaria 2		Recorded Lecture and Zoom Tutorial	
Week 10 - 21 Sep 2020			
Madula/Tania	Chapter	<b>Events and Submissions/Topic</b>	
Module/Topic	Chapter	Events and Sabinissions, ropic	
Revision	Chapter	Recorded Zoom Tutorial	
•	Спарсег	•	
Revision	Chapter	•	
Revision  Week 11 - 28 Sep 2020		Recorded Zoom Tutorial	
Revision  Week 11 - 28 Sep 2020  Module/Topic		Recorded Zoom Tutorial  Events and Submissions/Topic	

# **Term Specific Information**

Due to COVID-19, the dates for the Residential School(s) are yet to be set. You will be advised of these dates via the Moodle forum/site.

Your unit coordinator for BMSC14003, Integrated Pathology 2 is Dr Padraig Strappe You can contact me using the forum on the unit's Moodle site or alternatively through email (p.strappe@cqu.edu.au) or on 07 4930 6499. The forum for this unit is continuously monitored and you can expect a response within 24 hours of posting your question.

This unit will provide an integrated approach to examining the pathology associated with significant infectious diseases by examining the multiple interdisciplinary testing that occurs on patients samples in medical laboratories. An indepth approach for a selected number of diseases, e.g. Human Immunodeficiency Virus, Tuberculosis etc, and through lectures and tutorial sessions you will gain a thorough understanding of the laboratory testing and assays performed to aid in diagnosis of these infections and support monitoring of therapeutic interventions. Associated with advanced learning of the laboratory based assays will be an understanding of the pathology underlying the disease and current advances in research and treatment. The theoretical knowledge will be supported by an residential school which will focus on performing a range of interdisciplinary laboratory techniques, data analysis and presentation.

# **Assessment Tasks**

# 1 Laboratory Diagnostic Review

## **Assessment Type**

Case Study

## **Task Description**

In this assignment you will choose an infectious disease and describe in detail the various laboratory based testing that is performed on a patients sample. You can choose your own disease which must be different from the 4 diseases which we will study during the term, please contact the subject co-ordinator as to the appropriateness of your choice Write between one 2000 to 2500 word essay, supported by references (up to ten references) outfling advances in understanding disease pathology and laboratory based diagnosis. Review and critique in detail two 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, 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 7 Monday (31 Aug 2020) 11:55 pm AEST

## **Return Date to Students**

Week 9 Monday (14 Sept 2020)

## Weighting

25%

## Minimum mark or grade

50%

### **Assessment Criteria**

This assignment is worth an overall 25% and will be marked out of 100. 60 marks will be available for your description of the pathology of the disease and the diagnostic tests performed.40 marks in total is available for your critique of the two papers, 20 mark for the review of a paper associated with understanding of the pathogenesis of the disease and 20 marks for review of the paper describing advances in diagnosis. A detailed marking rubric will be available on the Moodle site.

## **Referencing Style**

Harvard (author-date)

## **Submission**

Online

## **Submission Instructions**

Submit online through 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.

#### **Graduate Attributes**

- Communication
- · Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Ethical practice

# 2 Laboratory Practical Assessment

## **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 assessment will comprise of laboratory based exercises which will be completed during the Residential School. The laboratory exercises will be described in the subject laboratory manual 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 site Competed laboratory manuals can be submitted in hard copy by hand on the final day of the Residential School or submitted through Moodle.

### **Assessment Due Date**

### **Return Date to Students**

### Weighting

35%

## Minimum mark or grade

50%

### **Assessment Criteria**

A marking rubric for the laboratory exercises in the residential school will be available on the Moodle site.

# **Referencing Style**

• Harvard (author-date)

## **Submission**

Offline Online

### **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

## **Graduate Attributes**

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence

# 3 Online test

## **Assessment Type**

Online Test

## **Task Description**

The online test will be completed through the Moodle site and be comprised of 3 sections with a combination of short answer and longer answer questions,

### **Assessment Due Date**

During the Examination Period Oct 15th to 23rd, Exact dates to be confirmed

## **Return Date to Students**

After certification of grades Nov 6th

## Weighting

40%

# Minimum mark or grade

50%

### **Assessment Criteria**

Assessment of the online test will be performed using a marking rubric for each question

# **Referencing Style**

• Harvard (author-date)

## **Submission**

Online

## **Learning Outcomes Assessed**

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

## **Graduate Attributes**

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy

# **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