

## In Progress

Please note that this Unit Profile is still in progress. The content below is subject to change.



# **BMSC13011 *Advanced Transfusion Science***

## **Term 2 - 2024**

Profile information current as at 19/05/2024 03:39 am

All details in this unit profile for BMSC13011 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 enables you to develop an advanced knowledge and understanding of the principles of Transfusion Science, building on the knowledge and understanding of the principles gained in earlier units. You will gain vital knowledge on topics such as safe blood storage and handling, blood typing and the detection and identification of antibodies significant in transfusion. You will also perform compatibility testing and discuss the potential adverse outcomes of blood transfusions plus pre-natal, antenatal and postnatal screening. You will be required to attend a compulsory residential school in Rockhampton and an assessment task will be completed on campus during this residential school. The theoretical and practical sessions will allow you to develop skills in critical steps necessary in providing safe blood for transfusion in routine and emergency situations.

### 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-requisites: BMSC12003 Haematology and Transfusion Science AND BMSC13009 Immunology OR BMSC13023 Applied Immunology

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

- 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 [Residential School Timetable](#).

### 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. **Case Study**

Weighting: 25%

#### 2. **Laboratory/Practical**

Weighting: 25%

#### 3. **Practical Assessment**

Weighting: Pass/Fail

#### 4. **Examination**

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 SUTE

**Feedback**

Some students felt that more examples and elaborations were required in some areas of the unit.

**Recommendation**

Continue to review and update lecture material as required.

#### Feedback from SUTE

**Feedback**

Some students did not interact much during the residential school and throughout the term.

**Recommendation**

Continue to increase use of interactive sessions throughout the term and during residential school.

#### Feedback from SUTE and self reflection

**Feedback**

The implementation of a virtual weekly quizzes via Kahoot enhanced student learning experience.

**Recommendation**

Continue to increase use of virtual kahoot quizzes in more areas of this unit for continued student experience.

## Unit Learning Outcomes

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

1. Discuss the production, labelling, storage and transportation of human blood products and their medical uses
2. Perform advanced testing in Transfusion Science including pre-transfusion, compatibility testing, antenatal and the testing for autoantibodies
3. Demonstrate the correct interpretation and reporting of test results in Transfusion Science
4. Examine the role of antibodies in erythrocyte destruction and their effect on the principles of transfusion including adverse transfusion outcomes
5. Critique the importance of quality control in transfusion science and explain the results
6. Discuss the factors contributing to adverse transfusion outcomes and their effects in transfusion science.

**Competency Based Standards for Medical Scientists, December 2009.**

**Unit 1:** Collection, preparation and analysis of clinical material - **Elements** 1.1.1 - 1.1.3; 1.1.6 - 1.1.8; 1.2.4; 1.3.1 - 1.3.5; 1.5.1 - 1.5.5 & 1.6.1 - 1.6.8;

**Unit 2:** Correlation and validation of results of investigations using knowledge of method(s) including analytical principles and clinical information - **Elements** 2.1.1 - 2.1.2; 2.2.1; 2.3.1 & 2.3.2

**Unit 3:** Interpretation, reporting and issuing of laboratory results - **Elements** 3.1.1

**Unit 4:** Maintenance of documentation, equipment, resources and stock - **Elements** 4.2.1 - 4.2.6

**Unit 5:** Maintenance and promotion of safe working practices - **Elements** 5.1.3; 5.2.1; 5.3.4; 5.3.9; 5.4.1 - 5.4.5

**Unit 6:** Professional accountability and participation in continuing professional development - **Elements** 6.5.6 & 6.5.7

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes					
	1	2	3	4	5	6
1 - Case Study - 25%				•		•
2 - Laboratory/Practical - 25%		•	•		•	
3 - Practical Assessment - 0%		•	•			
4 - Examination - 50%	•			•	•	•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes					
	1	2	3	4	5	6
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

Information for Textbooks and Resources has not been released yet.

This information will be available on Monday 17 June 2024

## Academic Integrity Statement

Information for Academic Integrity Statement has not been released yet.

This unit profile has not yet been finalised.