



# BMSC12014 Pharmacology for Health Professionals

## Term 2 - 2021

Profile information current as at 05/05/2024 04:09 am

All details in this unit profile for BMSC12014 have been officially approved by CQUUniversity 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 develop an understanding of the fundamental principles of pharmacology and pharmacotherapy relevant to your health profession. You will explore the mechanism of action of major drug classes used in pharmacological interventions or procedures in patient management relevant to your profession. You will be required to demonstrate critical analysis of this content and align this with current practice in your respective professions.

### Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

Pre-requisites: CG93 Medical Science (Nutrition) and CG95 Paramedic Sciences: BMSC12010 Clinical Biochemistry CB86 Bachelor of Podiatry Practice (Honours): ALLH11001, and BMSC11008 (or ALLH11004), and HLTH11027, and PSYC11010, and BMSC11007 (or ALLH11005), and ALLH11009 (or ALLH12007), and ALLH11006 and HLTH12028CV69

Echocardiography and Cardiac Physiology: ECHO11004 Biochemistry for Cardiac Pharmacology

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 - 2021

- Cairns
- Online
- Rockhampton
- Townsville

### 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 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. **Online Quiz(zes)**

Weighting: 20%

#### 2. **Written Assessment**

Weighting: 30%

#### 3. **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 Student Feedback, Feedback from Unit Coordinator

##### Feedback

Improve ease of navigating the Moodle site.

##### Recommendation

Cluster course-specific Modules to reduce potential confusion when navigating Moodle.

#### Feedback from Student Feedback

##### Feedback

Students would benefit from additional practice questions to help prepare them for the online assessment tasks.

##### Recommendation

Make more revision resources available on the Moodle site.

## Unit Learning Outcomes

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

1. Discuss the basic principles of pharmacology, including pharmacodynamics, pharmacokinetics and drug design
2. Discuss the indications, pharmacological action, routes of administration, contraindications, side effects and precautions of the major medication groups used in your health profession
3. Discuss pharmacological applications associated with common procedures undertaken with your health profession
4. Critically analyse the scientific literature relating to drugs and medicines within your health profession.

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
1 - Written Assessment - 30%		•	•	•
2 - Online Quiz(zes) - 20%	•			
3 - Online Test - 50%	•	•	•	

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4

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				

## Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Written Assessment - 30%	•	•	•	•				•		
2 - Online Quiz(zes) - 20%	•		•							
3 - Online Test - 50%	•		•					•		

## Textbooks and Resources

### Textbooks

BMSC12014

#### Supplementary

##### Pharmacology for Health Professionals

Edition: 5th (2018)

Authors: Bryant, Knights, Darroch, & Rowland

Elsevier

ISBN: 978-0-7295-4275-3

Binding: Paperback

#### Additional Textbook Information

If you prefer to study with a paper text, you can purchase one at the CQUni Bookshop here:

<http://bookshop.cqu.edu.au> (search on the Unit code).

[View textbooks at the CQUniversity Bookshop](#)

### 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

**Jordon Irwin** Unit Coordinator

[j.irwin@cqu.edu.au](mailto:j.irwin@cqu.edu.au)

## Schedule

### Week 1 - 12 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Pharmacology	Module 1 of the Pharmacology Handbook (available on Moodle Site)	Online Zoom Tutorial on Module 1

### Week 2 - 19 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Pharmacodynamics and Pharmacokinetics Part 1	Module 2 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 2

### Week 3 - 26 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
Pharmacokinetics Part 2 and Dosing Profiles	Module 3 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 3

**Week 4 - 02 Aug 2021**

Module/Topic	Chapter	Events and Submissions/Topic
Drug Development and Therapeutic Drug Monitoring	Module 4 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 4

**Week 5 - 09 Aug 2021**

Module/Topic	Chapter	Events and Submissions/Topic
Drugs for Chronic Cardiovascular Conditions	Module 5 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 5  <b>Introductory Pharmacology Quiz</b> Due: Week 5 Friday (13 Aug 2021) 5:00 pm AEST

**Vacation Week - 16 Aug 2021**

Module/Topic	Chapter	Events and Submissions/Topic
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**Week 6 - 23 Aug 2021**

Module/Topic	Chapter	Events and Submissions/Topic
Drugs for Thrombosis and Haemostasis (all students)	Module 6 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 6

**Week 7 - 30 Aug 2021**

Module/Topic	Chapter	Events and Submissions/Topic
Drugs for Common Chronic Non-cardiovascular Conditions	Module 7 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 7

**Week 8 - 06 Sep 2021**

Module/Topic	Chapter	Events and Submissions/Topic
Module 8 Drugs for Lipid-Lowering (CV69) OR Drugs for Treating Envenomation, Poisoning and Overdoses (CG95)	Module 8 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 8

**Week 9 - 13 Sep 2021**

Module/Topic	Chapter	Events and Submissions/Topic
Module 9 Drugs for Echocardiography Procedures Part 1 (CV69) OR Drugs for Treating Emergency Respiratory, Allergic and Adrenal Conditions (CG95)	Module 9 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 9  <b>Case Study Drug Review</b> Due: Week 9 Friday (17 Sept 2021) 5:00 pm AEST

**Week 10 - 20 Sep 2021**

Module/Topic	Chapter	Events and Submissions/Topic
Module 10 Drugs for Echocardiography Procedures Part 2 (CV69) OR Drugs for Emergency Analgesia, Sedation and Anaesthesia (CG95)	Module 10 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 10

**Week 11 - 27 Sep 2021**

Module/Topic	Chapter	Events and Submissions/Topic
Module 11 Drugs Which Induce Cardiotoxicity (CV69) OR Drugs for Treating Emergency Cardiovascular Conditions (CG95)	Module 11 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 11

**Week 12 - 04 Oct 2021**

Module/Topic	Chapter	Events and Submissions/Topic
Revision	N/A	Online Zoom Tutorial on Revision

## Term Specific Information

### **BMSC12014 is a modularised unit**

BMSC12014 is comprised of three main blocks of content. Modules 1-4 cover introductory concepts, Modules 5-7 cover common 'everyday' drugs and Modules 8-11 cover the drugs which are used in, or are especially important to, your health profession. This means that, for Weeks 8-11, students from different disciplines cover different modules. The unit has been structured in this manner to ensure that you are learning the most relevant material for your health profession.

### **Lectures and Tutorials**

All lectures for this unit are pre-recorded and are available on the unit's Moodle site. Live tutorials will be delivered each week using Zoom. During these sessions, we will cover practice questions to help you become comfortable with the style of questions you will encounter in the Online Quiz and end-of-term Online Test. All tutorials will be recorded and made available for viewing on the Moodle site.

### **Readings in this Unit**

All readings for this unit come from the Pharmacology Handbook, a copy of which is available on the Moodle Site. If you would like additional readings to aid your study, you are welcome to purchase the supplementary textbook (i.e. Pharmacology for Health Professionals). It is optional to purchase this text - all the resources you need to succeed in this unit will be available on the Moodle site.

### **Contacting the Teaching Staff**

The best way to contact the Teaching Staff is via the Q&A forum on the unit Moodle site. All queries of a personal nature, however, should be sent directly to the Unit Coordinator.

### **Unit Study Commitment**

As per Australian education standards, this unit has a Study Commitment of 150 hours total engagement for the term. A suggestion for how you should allocate your weekly study commitment to BMSC12014 is as follows:

- 2-3 hours watching recorded lectures and attending/viewing the tutorial.
- 1-2 hours completing the recommended readings.
- 2-3 hours completing the weekly study questions and practice assessment activities.
- 3-4 hours preparing for the Online Quizzes, Written Assessment or Online Test.

## Assessment Tasks

### 1 Introductory Pharmacology Quiz

#### **Assessment Type**

Online Quiz(zes)

#### **Task Description**

A sound knowledge of pharmacodynamics, pharmacokinetics, drug development and therapeutic drug monitoring is essential for understanding how drugs work. After learning about these concepts in Modules 1-4, you will complete an Online Quiz to assess how well you can apply your knowledge of this material to 'real world' case studies. The Quiz will be comprised of 40 short-response questions (each worth one mark = 40 marks total) and you will have 75 minutes to complete it. Exemplar case studies, questions and responses will be worked through in the Weeks 1-4 tutorials.

The Quiz will open at 5pm on Monday of Week 5 (9th August 2021) and will close on Friday of Week 5 (13th August 2021). You will have only one (1) attempt to complete the Quiz. Your score from the Online Quiz will contribute 20% to your final grade, and you must obtain at least 50% of the available marks to be eligible to pass the unit. This is an individual task, and as such, no collusion or team work is permitted when answering the questions. In the absence of an approved extension, there will be no opportunity to complete the task after the closing date of the Quiz.

#### **Number of Quizzes**

1

#### **Frequency of Quizzes**

Other

#### **Assessment Due Date**

Week 5 Friday (13 Aug 2021) 5:00 pm AEST

The Quiz will end once you click submit or when the time limit has been exhausted.

#### **Return Date to Students**

Week 7 Friday (3 Sept 2021)

This Quiz will be graded manually and feedback returned via Moodle.

**Weighting**

20%

**Minimum mark or grade**

This assessment has a minimum pass grade of 50% (i.e. 20/40).

**Assessment Criteria**

Each correct answer in the quiz will be awarded one (1) mark. No marks will be deducted for incorrect answers.

**Referencing Style**

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

**Submission**

Online

**Submission Instructions**

The Quiz will be accessed and completed individually via Moodle.

**Learning Outcomes Assessed**

- Discuss the basic principles of pharmacology, including pharmacodynamics, pharmacokinetics and drug design

**Graduate Attributes**

- Communication
- Critical Thinking

## 2 Case Study Drug Review

**Assessment Type**

Written Assessment

**Task Description**

This assessment task provides you with an opportunity to practice using the scientific literature to evaluate 'real world' case studies. Using knowledge gained from appraising Journal articles and other academic resources, you will decide whether appropriate pharmacology-related decisions have been made. You must provide references from the scientific literature to justify your position.

Your score from the Case Study Drug Review will contribute 30% to your final grade, and you must obtain at least 50% of the available marks to be eligible to pass the unit. The case studies you will need to evaluate are on the Moodle site, and resources to help you prepare your responses are also available. This is an individual task, and as such, no collusion or team work is permitted when preparing your submission.

**Assessment Due Date**

Week 9 Friday (17 Sept 2021) 5:00 pm AEST

In the absence of an approved extension, a 5% late penalty will be applied per day that the task remains unsubmitted.

**Return Date to Students**

Week 10 Friday (24 Sept 2021)

Results and feedback will be returned via Moodle.

**Weighting**

30%

**Minimum mark or grade**

This assessment has a minimum pass grade of 50% (i.e. 30/60).

**Assessment Criteria**

The maximum grade for this assessment task is 60/60 marks. A brief overview of the assessment criteria are as follows:

- Fundamental content - 20 marks available for scientific content that demonstrates a clear understanding of the mechanism of action, routes of administration, indications, side effects, drug interactions and contraindications of clinically relevant drugs.
- Justification of arguments - 20 marks available for critical evaluation of the literature to support decisions and positioning of arguments.
- Referencing - 10 marks available for appropriate formatting of in-text references and reference list.
- Overall presentation - 10 marks available for correct spelling, grammar and sentence/paragraph structure.

**Referencing Style**

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



- [Vancouver](#)

### **Submission**

Online

### **Submission Instructions**

Your responses are to be submitted in a Word document via Moodle.

### **Learning Outcomes Assessed**

- Discuss the indications, pharmacological action, routes of administration, contraindications, side effects and precautions of the major medication groups used in your health profession
- Discuss pharmacological applications associated with common procedures undertaken with your health profession
- Critically analyse the scientific literature relating to drugs and medicines within your health profession.

### **Graduate Attributes**

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Ethical practice

## **3 Online Test**

### **Assessment Type**

Online Test

### **Task Description**

You will complete one (1) Online Test which will evaluate your knowledge of the drugs presented in this unit. The Test is comprised of five (5) questions, and each question is worth 20 marks. You must respond to all five questions, and all answers are to be entered into the response boxes provided. You will be permitted only one (1) attempt to complete the Test. Your score from the Online Test will contribute 50% to your final grade, and you must obtain at least 50% of the available marks to be eligible to pass the unit. This is an individual task, and as such, no collusion or team work is permitted when answering the Test questions. Exemplar questions and responses will be worked through in the Weeks 5-11 tutorials.

### **Assessment Due Date**

The Online Test will be scheduled during the 'Term 2 Examination period'. The exact date will be made available on Moodle once confirmed.

### **Return Date to Students**

This assessment will be manually graded and results returned via Moodle.

### **Weighting**

50%

### **Minimum mark or grade**

This assessment has a minimum pass grade of 50% (i.e. 50/100).

### **Assessment Criteria**

Marks will be awarded for correct responses. No marks will be deducted for incorrect answers.

### **Referencing Style**

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

### **Submission**

Online

### **Submission Instructions**

The Quiz will be accessed and completed individually via Moodle.

### **Learning Outcomes Assessed**

- Discuss the basic principles of pharmacology, including pharmacodynamics, pharmacokinetics and drug design
- Discuss the indications, pharmacological action, routes of administration, contraindications, side effects and precautions of the major medication groups used in your health profession
- Discuss pharmacological applications associated with common procedures undertaken with your health

profession

### Graduate Attributes

- Communication
- Critical Thinking
- Ethical practice

## 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