



# BMSC12014 Pharmacology for Health Professionals

## Term 2 - 2023

Profile information current as at 23/04/2024 04:02 pm

All details in this unit profile for BMSC12014 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 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: Pre-requisite for all courses except CV69: BMSC11005 Foundations of Biochemistry Pre-requisite for CV69: 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 - 2023

- 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 emails; SUTE

**Feedback**

The oral feedback students received for the written assessment task was comprehensive and constructive.

**Recommendation**

Continue to provide oral feedback for the written assessment task.

#### Feedback from SUTE

**Feedback**

The unit provides useful information about 'on-the-job' pharmaceuticals and common prescription drugs in Australia.

**Recommendation**

Continue to provide course-specific material as well as content on common prescription medications.

#### Feedback from SUTE

**Feedback**

The 'real-world' drug examples provided in the tutorials made the unit more interesting.

**Recommendation**

Continue to integrate clinical ('real-world') examples into the unit material.

## 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
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.**

#### Additional Textbook Information

All core readings for this unit are provided for free on the unit's Moodle site. If you would like additional readings, you may wish to purchase 'Pharmacology for Health Professionals' (complete details below). This textbook contains relevant information, but it is not used directly in BMSC12014, so purchasing it is completely optional.

Pharmacology for Health Professionals

Authors: Knights, Rowland, Darroch, Bushell, Hatje and Reinke

6th Edition (2022)

ISBN: 9780729544627

### 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 - 10 Jul 2023

Module/Topic	Chapter	Events and Submissions/Topic
<b>Module 1   Introduction to Pharmacology</b>	Module 1 of the Pharmacology Handbook (available on Moodle)	Tutorial on Unit Overview

### Week 2 - 17 Jul 2023

Module/Topic	Chapter	Events and Submissions/Topic
<b>Module 2   Introduction to Pharmacodynamics</b>	Module 2 of the Pharmacology Handbook (available on Moodle)	Tutorial on Module 1

### Week 3 - 24 Jul 2023

Module/Topic	Chapter	Events and Submissions/Topic
<b>Module 3   Introduction to Pharmacokinetics</b>	Module 3 of the Pharmacology Handbook (available on Moodle)	Tutorial on Module 2

### Week 4 - 31 Jul 2023

Module/Topic	Chapter	Events and Submissions/Topic
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**Module 4 | Introduction to Drug Development, Dosing Regimens and Therapeutic Drug Monitoring**

Module 4 of the Pharmacology Handbook (available on Moodle)

Tutorial on Module 3

**Week 5 - 07 Aug 2023****Module/Topic****Chapter****Events and Submissions/Topic****Module 5 | Common Prescription Drugs I**

Cardiovascular drugs and antidiabetic medications

Module 5 of the Pharmacology Handbook (available on Moodle)

Tutorial on Module 4

**Introductory Pharmacology Quiz**  
Opens: Week 5 Tuesday (8 Aug 2023) 12:01 am AEST**Vacation Week - 14 Aug 2023****Module/Topic****Chapter****Events and Submissions/Topic****Vacation Week | Catch-up, Assessment Preparation, Revision****Introductory Pharmacology Quiz**  
Due: Vacation Week Monday (14 Aug 2023) 9:00 am AEST**Week 6 - 21 Aug 2023****Module/Topic****Chapter****Events and Submissions/Topic****Module 6 | Pharmacology in Practice I**CG95/CM40: Cardiovascular drugs delivered by paramedics  
CV69: Cardiovascular drugs and contrast agents used in echocardiography procedures

Module 6 of the Pharmacology Handbook (available on Moodle)

Tutorial on Module 5

**Week 7 - 28 Aug 2023****Module/Topic****Chapter****Events and Submissions/Topic****Module 7 | Common Prescription Drugs II**

Medications for asthma, allergic reactions, inflammation and pain

Module 7 of the Pharmacology Handbook (available on Moodle)

Tutorial on Module 6

**Week 8 - 04 Sep 2023****Module/Topic****Chapter****Events and Submissions/Topic****Module 8 | Common Prescription Drugs III**

Medications for CNS and musculoskeletal disorders

Module 8 of the Pharmacology Handbook (available on Moodle)

Tutorial on Module 7

**Week 9 - 11 Sep 2023****Module/Topic****Chapter****Events and Submissions/Topic****Module 9 | Pharmacology in Practice II**CG95/CM40: CNS drugs and antidotes delivered by paramedics  
CV69: CNS drugs and reversal agents used in echocardiography procedures

Module 9 of the Pharmacology Handbook (available on Moodle)

Tutorial on Module 8

**Case Study Assignment** Due: Week 9 Monday (11 Sept 2023) 9:00 am AEST**Week 10 - 18 Sep 2023****Module/Topic****Chapter****Events and Submissions/Topic****Module 10 | Common Prescription Drugs IV**

Medications for gastrointestinal disorders, glaucoma, urogenital conditions and infections

Module 10 of the Pharmacology Handbook (available on Moodle)

Tutorial on Module 9

**Week 11 - 25 Sep 2023****Module/Topic****Chapter****Events and Submissions/Topic**

### Module 11 | Pharmacology in Practice III

CG95/CM40: Drugs for treating emergency respiratory, allergy, gastrointestinal and endocrine conditions  
CV69: Drug-induced cardiotoxicity

Module 11 of the Pharmacology Handbook (available on Moodle)

Tutorial on Module 10

#### Week 12 - 02 Oct 2023

Module/Topic

Chapter

Events and Submissions/Topic

Revision

Tutorial on Module 11  
**Online Test** Opens: Week 12  
Thursday (5 Oct 2023) 12:01 am AEST

#### Review/Exam Week - 09 Oct 2023

Module/Topic

Chapter

Events and Submissions/Topic

**Online Test** Due: Review/Exam Week  
Monday (9 Oct 2023) 9:00 am AEST

## Term Specific Information

### Contact details for Teaching Staff

The unit coordinator for BMSC12014, Jordon Irwin, can be reached via email (j.irwin@cqu.edu.au), phone (07 4923 2550) and the Q&A forum on Moodle.

### Unit Modules

BMSC12014 is comprised of three main blocks of content: 'introductory pharmacology' (Modules 1 to 4), 'common prescription drugs' (Modules 5, 7, 8 and 10) and 'pharmacology in practice' (Modules 6, 9, and 11). Students from all courses complete the same 'introductory pharmacology' and 'common prescription drug' modules. Contrastingly, the 'pharmacology in practice' modules are course-specific to ensure that you are learning about drugs which are directly relevant to your healthcare profession. All that may sound terribly complicated, but a resource to help you navigate Moodle so you know exactly which module you should be studying each week is provided on the Moodle site.

### Lectures and Tutorials

All lectures for this unit are pre-recorded and available on the unit's Moodle site. Live tutorials are delivered weekly on Zoom, but they are also recorded and made available for later viewing on the Moodle site.

### Readings in this Unit

All readings come from the 'Pharmacology Handbook' which is available on the Moodle site. If you would like to do some additional reading, you are welcome to purchase the following textbook: Pharmacology for Health Professionals by Knights, Rowland, Darroch, Bushell, Hatje and Reinke. This textbook, however, is not directly used in the unit, so purchasing it is completely optional. All the resources that you will need to succeed in BMSC12014 are available for free on the Moodle site.

### 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 for BMSC12014 is as follows:

- 3-4 hours watching lectures and tutorials.
- 1-2 hours completing the Pharmacology Handbook readings.
- 2-3 hours completing the weekly tutorial quizzes and practice assessment activities.
- 2-3 hours preparing for the Introductory Pharmacology Quiz, Written Assessment or Online Test.

## Assessment Tasks

### 1 Introductory Pharmacology Quiz

#### Assessment Type

Online Quiz(zes)

#### Task Description

A sound knowledge of molecular drug targets, pharmacodynamics, pharmacokinetics, drug development, dosing regimens and therapeutic drug monitoring is essential for understanding how drugs are used in healthcare. After

learning about these concepts in Modules 1 to 4, you will complete an Online Quiz.

You are permitted only one (1) attempt for this assessment task, and your score from the Online Quiz will contribute 20% to your final grade. No collusion, AI chatbot or teamwork is permitted when completing the Introductory Pharmacology Quiz.

The dates and times for the Introductory Pharmacology Quiz are outlined below (all times shown are AEST):

- The Introductory Pharmacology Quiz will open at 12:01 am on Tuesday 8th August 2023 (Week 5) and will remain open until 9:00 am on Monday 14th August 2023 (Vacation Week). This quiz will assess the topics covered during Weeks 1 to 4 i.e., the 'introductory pharmacology' modules.

**Number of Quizzes**

1

**Frequency of Quizzes**

Other

**Assessment Due Date**

Vacation Week Monday (14 Aug 2023) 9:00 am AEST

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

**Return Date to Students**

Week 7 Monday (28 Aug 2023)

The Introductory Pharmacology Quiz will be graded manually, and the results will be returned via Moodle within two (2) weeks of submission.

**Weighting**

20%

**Minimum mark or grade**

50%

**Assessment Criteria**

Marks will be awarded for correct responses.

**Referencing Style**

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

**Submission**

Online

**Submission Instructions**

The Introductory Pharmacology Quiz will be accessed and completed individually via Moodle.

**Learning Outcomes Assessed**

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

## 2 Case Study Assignment

**Assessment Type**

Written Assessment

**Task Description**

In this assessment task, you will use scientific literature to answer a series of questions on selected case studies. For some responses, the journal articles to appraise will be given to you, for others, you will need to do your own research. To answer the questions correctly, you must critically analyse journal articles and discuss the indications, mechanisms of action, pharmacokinetics, precautions and/or applications of drugs which are used in your health profession. The questions and resources which you will require to complete this assignment are available on the BMSC12014 Moodle site.

Your score from the Case Study Drug Review will contribute 30% to your final grade. No collusion, AI chatbot or teamwork is permitted when preparing your submission.

**Assessment Due Date**

Week 9 Monday (11 Sept 2023) 9:00 am 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 11 Monday (25 Sept 2023)

Results and feedback will be returned via Moodle within two (2) weeks of submission.



**Weighting**

30%

**Minimum mark or grade**

50%

**Assessment Criteria**

A brief overview of the assessment criteria is as follows:

- Knowledge and understanding – the submission should contain accurate information about the mechanism of action, routes of administration, indications, side effects, drug interactions, precautions, contraindications and/or applications of drugs relevant to the case study.
- Critical thinking – critical analysis of the scientific literature must be demonstrated throughout the assignment.
- Research – an ability to differentiate between scholarly and non-scholarly sources of information must be demonstrated.
- Communication – all responses should be coherent, cohesive and demonstrate correct spelling, grammar and 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 .doc or .docx file format 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.

## 3 Online Test

**Assessment Type**

Online Test

**Task Description**

At the end of term, you will complete an Online Test which will evaluate your knowledge of the drugs presented in Modules 5 to 11.

You are permitted only one (1) attempt for this assessment task, and your score from the Online Test will contribute 50% to your final grade. No collusion, AI chatbot or teamwork is permitted when completing the Online Test.

The dates and times for the Online Test are outlined below (all times shown are AEST):

- The Online Test will open at 12:01 am on Thursday 5th October 2023 (Week 12) and will remain open until 9:00 am on Monday 9th October 2023 (Revision/Exam Week). This test will assess the topics covered during Weeks 5 to 11 i.e., the 'common prescription drugs' and 'pharmacology in practice' modules.

**Assessment Due Date**

Review/Exam Week Monday (9 Oct 2023) 9:00 am AEST

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

**Return Date to Students**

Exam Week Friday (20 Oct 2023)

The Online Test will be manually graded, and the results will be returned via Moodle within two (2) weeks of submission.

**Weighting**

50%

**Minimum mark or grade**

50%

**Assessment Criteria**

Marks will be awarded for correct responses.

## Referencing Style

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

## Submission

Online

## Submission Instructions

The Online Test 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

## 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