



# BMSC12014 Pharmacology for Health Professionals

## Term 1 - 2022

Profile information current as at 19/08/2022 06:46 pm

All details in this unit profile for BMSC12014 have been officially approved by CQU University 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 1 - 2022

- Online

### 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
<b>1 - Written Assessment - 30%</b>		•	•	•
<b>2 - Online Quiz(zes) - 20%</b>	•			
<b>3 - Online Test - 50%</b>	•	•	•	

### 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

Optional resource only for students who prefer study with textbooks. All resources and information that the students need to succeed in the unit will be provided on Moodle.

[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:**

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

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 - 07 Mar 2022

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

### Week 2 - 14 Mar 2022

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

### Week 3 - 21 Mar 2022

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

Week 4 - 28 Mar 2022		
Module/Topic	Chapter	Events and Submissions/Topic
<b>Module 4   Drug Development and Therapeutic Drug Monitoring</b>	Module 4 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 3
Week 5 - 04 Apr 2022		
Module/Topic	Chapter	Events and Submissions/Topic
<b>Module 5   Common Drugs for Chronic Conditions I (Cardiovascular Diseases)</b>	Module 5 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 4  <b>Introductory Pharmacology Quiz</b> Due: Week 5 Friday (8 Apr 2022) 8:00 pm AEST
Vacation Week - 11 Apr 2022		
Module/Topic	Chapter	Events and Submissions/Topic
Week 6 - 18 Apr 2022		
Module/Topic	Chapter	Events and Submissions/Topic
<b>Module 6   Common Drugs for Chronic Conditions II (Thrombosis and Haemostasis)</b>	Module 6 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 5
Week 7 - 25 Apr 2022		
Module/Topic	Chapter	Events and Submissions/Topic
<b>Module 7   Common Drugs for Chronic Conditions III (Depression, Anxiety, Asthma, Epilepsy and Pain)</b>	Module 7 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 6
Week 8 - 02 May 2022		
Module/Topic	Chapter	Events and Submissions/Topic
<b>Module 8   Profession Specific Pharmacology I</b> CB66, CB86, CG93 (Nutrition), CV69 = Drugs for Lipid-Lowering CG95 = Drugs for Treating Envenomation, Poisoning and Overdoses	Module 8 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 7
Week 9 - 09 May 2022		
Module/Topic	Chapter	Events and Submissions/Topic
<b>Module 9   Profession Specific Pharmacology II</b> CB66 and CG93 (Nutrition) = Drugs for Treating Allergic Reactions, Vomiting and Obesity CB86 = Antimicrobials for Podiatry CG95 = Drugs for Treating Emergency Respiratory, Allergic and Adrenal Conditions CV69 = Drugs for Echocardiography Procedures	Module 9 of the Pharmacology Handbook (available on Moodle)	Online Zoom Tutorial on Module 8  <b>Case Study Drug Review</b> Due: Week 9 Friday (13 May 2022) 8:00 pm AEST
Week 10 - 16 May 2022		
Module/Topic	Chapter	Events and Submissions/Topic

### Module 10 | Profession Specific Pharmacology III

CB66 and CG93 (Nutrition) = Drug for Managing Diabetes Mellitus  
CB86 = Drugs for Pain, Inflammation, Procedural Anxiety and Allergic Reactions in Podiatry  
CG95 = Drugs for Emergency Analgesia, Sedation and Anaesthesia  
CV69 = Drugs for Echocardiography Procedures (continued)

Module 10 of the Pharmacology Handbook (available on Moodle)

Online Zoom Tutorial on Module 9

### Week 11 - 23 May 2022

#### Module/Topic

#### Chapter

#### Events and Submissions/Topic

### Module 11 | Profession Specific Pharmacology IV

CB66 and CG93 (Nutrition) = Food-Drug Interactions and Drugs of Abuse  
CB86 = Drug for Managing Diabetes Mellitus  
CG95 = Drugs for Treating Emergency Cardiovascular Conditions  
CV69 = Drugs Which Induce Cardiotoxicity

Module 11 of the Pharmacology Handbook (available on Moodle)

Online Zoom Tutorial on Module 10

### Week 12 - 30 May 2022

#### Module/Topic

#### Chapter

#### Events and Submissions/Topic

#### Revision

Online Zoom Tutorial on Module 11

## 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 through to 11, students from different disciplines cover different modules. The unit has been structured in this way to ensure that you are learning material that is relevant to your chosen area of study.

### Lectures and Tutorials

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

### Readings in this Unit

All readings for this unit come from the unit-specific Pharmacology Handbook, a copy of which is available on the Moodle site. If you would like additional readings, you are welcome to purchase the supplementary textbook: Pharmacology for Health Professionals by Bryant, Knights, Darroch, & Rowland. This is an optional textbook. All the resources that you will need to succeed in BMSC12014 are available on the Moodle site.

### Contacting the Teaching Staff

The best way to contact the Teaching Staff is via the Q&A forum. All queries of a personal nature 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 for 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 and how they are used in the clinical setting. After learning about these concepts in Modules 1-4, you will complete an Online Quiz.

The Quiz will be comprised of a series of short-response questions. You will be permitted only one (1) attempt for this assessment task. Practice questions and exemplar responses will be worked through in the Weeks 1-4 tutorials.

Your score from the Online Quiz will contribute 20% to your final grade. No collusion or teamwork is permitted. In the absence of an approved extension, there will be no opportunity to complete the Online Quiz after its closing date.

**Number of Quizzes**

1

**Frequency of Quizzes**

Other

**Assessment Due Date**

Week 5 Friday (8 Apr 2022) 8:00 pm AEST

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

**Return Date to Students**

Week 6 Friday (22 Apr 2022)

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

**Weighting**

20%

**Minimum mark or grade**

50%

**Assessment Criteria**

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

**Referencing Style**

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

**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**

In this assessment task, you will use the scientific literature to evaluate 'real world' case studies (provided on Moodle).

You will appraise evidence from peer-reviewed Journal articles to establish whether appropriate pharmacology-related decisions have been made in the case studies. The resources that you will need to help you prepare for this assessment tasks are available on Moodle.

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. This is an individual task, and as such, no collusion or teamwork is



permitted when preparing your submission.

**Assessment Due Date**

Week 9 Friday (13 May 2022) 8:00 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 11 Friday (27 May 2022)

Results and feedback will be returned via Moodle.

**Weighting**

30%

**Minimum mark or grade**

50%

**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/or contraindications of the major medication groups used in your health profession
- 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**

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

**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 an Online Test which will evaluate your knowledge of the drugs presented in this unit. The Test will be comprised of a series of short-response questions. You will be permitted only one attempt for this assessment task. Practice questions and exemplar responses will be worked through in the Weeks 5-11 tutorials.

Your score from the Online Test will contribute 50% to your final grade. No collusion or teamwork is permitted. In the absence of an approved extension, there will be no opportunity to complete the Online Quiz after its closing date. The Test is scheduled for Week 13 of Term. The exact date will be made available on Moodle once confirmed.

**Assessment Due Date**

The Online Test is scheduled for Week 13. 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**

50%

**Assessment Criteria**

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

**Referencing Style**

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

**Submission**

Online

**Submission Instructions**

The 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

**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