



BMSC12014 Pharmacology for Health Professionals

Term 1 - 2023

Profile information current as at 03/05/2024 10:50 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 1 - 2023

- 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 Unit coordinator

Feedback

The revision activities provided to students contributes to strong performance in assessment tasks.

Recommendation

Continue to implement effective revision resources/strategies.

Feedback from SUTE

Feedback

The organisation and presentation of the unit content facilitates a systematic approach to learning.

Recommendation

Continue with this style of content delivery.

Feedback from Students; Unit coordinator

Feedback

The wording of some questions in the End-of-Term online test could be improved.

Recommendation

Review the question bank and correct as appropriate.

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

 N/A Level	 Introductory Level	 Intermediate Level	 Graduate Level	 Professional Level	 Advanced Level
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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

BMSC12014

Supplementary

Pharmacology for Health Professionals

6th Edition (2022)

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

Elsevier

ISBN: 9780729544627

Binding: Paperback

Additional Textbook Information

The purchase and use this textbook is **OPTIONAL**. Free and alternative core readings for the unit will be provided on the Moodle site.

[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

Schedule

Week 1 - 06 Mar 2023

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

Week 2 - 13 Mar 2023

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

Week 3 - 20 Mar 2023

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

Week 4 - 27 Mar 2023

Module/Topic	Chapter	Events and Submissions/Topic
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 - 03 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
Module 5 Common Prescription Drugs I Medications for cardiovascular diseases	Module 5 of the Pharmacology Handbook (available on Moodle)	Tutorial on Module 4

Vacation Week - 10 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
Vacation Week Catch-up, Assessment Preparation, Revision		Introductory Pharmacology Quiz Opens: Vacation Week Friday (14 Apr 2023) 9:00 am AEST

Week 6 - 17 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
Module 6 Pharmacology in Practice I CG95/CM40: Cardiovascular drugs delivered by paramedics CV69: Cardiovascular drugs used in echocardiography procedures	Module 6 of the Pharmacology Handbook (available on Moodle)	Tutorial on Module 5 Introductory Pharmacology Quiz Due: Week 6 Tuesday (18 Apr 2023) 11:59 pm AEST

Week 7 - 24 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
Module 7 Common Prescription Drugs II Medications for allergic reactions, inflammation and pain	Module 7 of the Pharmacology Handbook (available on Moodle)	Tutorial on Module 6

Week 8 - 01 May 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 - 08 May 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 invasive echocardiography procedures	Module 9 of the Pharmacology Handbook (available on Moodle)	Tutorial on Module 8 Case Study Drug Review Due: Week 9 Friday (12 May 2023) 11:59 pm AEST

Week 10 - 15 May 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 - 22 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
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Module 11 | Pharmacology in Practice III

CG95/CM40: Respiratory-, allergy-, gastrointestinal- and endocrine-related drugs delivered by paramedics
CV69: Drugs which cause cardiotoxicity

Module 11 of the Pharmacology Handbook (available on Moodle)

Tutorial on Module 10

Week 12 - 29 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
Revision		Tutorial on Module 11 Online Test Opens: Week 12 Friday (2 June 2023) 9:00 am AEST

Review/Exam Week - 05 Jun 2023

Module/Topic	Chapter	Events and Submissions/Topic
Revision and Online Test		Online Test Due: Review/Exam Week Tuesday (6 June 2023) 11:59 pm AEST

Exam Week - 12 Jun 2023

Module/Topic	Chapter	Events and Submissions/Topic
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Term Specific Information

Contact details for Teaching Staff

The Unit Coordinator for BMSC12014 is Jordon Irwin. Jordon can be reached via email (j.irwin@cqu.edu.au) and phone (07 4923 2550); however, the preferred method of contact is the Q&A forum on Moodle. Of course, if your query is of a personal nature, please contact Jordon directly.

Unit Modules

BMSC12014 is comprised of three main blocks of content: introductory pharmacology (which are covered in 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 cover the same content in the introductory pharmacology and prescription drug modules. In the pharmacology in practice modules, however, CG95/CM40 students will learn about the drugs delivered by paramedics while CV69 students will learn about drugs related to echocardiography procedures and cardiotoxicity. The unit content has been split in this way to ensure that you are learning material that is directly relevant to your healthcare profession.

Lectures and Tutorials

All lectures for this unit are pre-recorded and available on the unit's Moodle site. Each week there is a live (recorded) tutorial which is delivered via Zoom, the timetable and links for these sessions are also provided on the unit's Moodle site. During the tutorials, we cover practice questions to help you become comfortable with the style of questions in the Online Quiz and Online Test. It is highly recommended that you complete the tutorial questions, even if you cannot attend the tutorials.

Readings in this Unit

All readings come from the unit-specific Pharmacology Handbook which is available on the Moodle site. If you would like to do some additional reading around the unit content, you are welcome to purchase the following textbook: Pharmacology for Health Professionals by Bryant, Knights, Darroch, & Rowland. It is completely optional to purchase this textbook, you do not need it for BMSC12014. 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(es)

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 work and how they 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. Practice questions and exemplar responses will be worked through in the 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 6 Tuesday (18 Apr 2023) 11:59 pm AEST

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

Return Date to Students

Week 8 Tuesday (2 May 2023)

The Introductory Pharmacology 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

- [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 Drug Review

Assessment Type

Written Assessment

Task Description

In this assessment task, you will use the scientific literature to answer a series of questions about a case study that is specific to your course of study. To answer the questions, you will need to appraise evidence from peer-reviewed journal articles and use specific trials/studies from the scientific literature. Using references from the scientific literature, and critically evaluating these sources, is essential for this assessment task. Further instructions and resources for completing this assignment 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 (12 May 2023) 11:59 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 (26 May 2023)

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 is as follows:

- Accuracy and relevance of information (20 marks) – a clear understanding of the mechanism of action, routes of administration, indications, side effects, drug interactions, precautions and/or contraindications of drugs relevant to the case study should be demonstrated.
- Critical analysis of the scientific literature (20 marks) – scholarly sources must be used to support the responses, and these sources should be actively compared and contrasted.
- Presentation and writing (10 marks) – the responses should be coherent, cohesive and demonstrate correct spelling, grammar and paragraph structure.
- Referencing (10 marks) – in-text references must be used. Only scholarly sources (i.e., peer-reviewed journal articles) should be referenced, and their bibliographical details should be formatted correctly in a reference list. Vancouver, APA OR Harvard referencing can be used.

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

You will complete an Online Test which will evaluate your knowledge of the drugs presented in this unit (i.e., Modules 5 to 11). You are permitted only one (1) attempt for this assessment task. Practice questions and exemplar responses will be worked through in the 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 Test after its closing date.

Assessment Due Date

Review/Exam Week Tuesday (6 June 2023) 11:59 pm 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 (16 June 2023)

The Online Test 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

- [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