



BMSC12014 Pharmacology for Health Professionals

Term 1 - 2021

Profile information current as at 19/04/2024 12:02 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 - 2021

- 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

The style of unit delivery and learning resources enabled students to engage with (and retain) the unit content effectively.

Recommendation

This presentation style will be retained.

Feedback from Student Feedback

Feedback

Students appreciated the variation in assessment tasks.

Recommendation

The assessment profile will be retained.

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 | | | | |

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

[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:

- [Harvard \(author-date\)](#)
- [Vancouver](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Jordon Irwin Unit Coordinator

j.irwin@cqu.edu.au

Schedule

Week 1 - 08 Mar 2021

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|----------------------------------|
| Module 1 Introduction to Pharmacology (all students) | Module 1 Pharmacology Handbook (available on Moodle Site) | Online Zoom Tutorial on Module 1 |

Week 2 - 15 Mar 2021

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|--|----------------------------------|
| Module 2 Pharmacodynamics and Pharmacokinetics Part 1 (all students) | Module 2 Pharmacology Handbook (available on Moodle) | Online Zoom Tutorial on Module 2 |

Week 3 - 22 Mar 2021

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|--|----------------------------------|
| Module 3 Pharmacokinetics Part 2 and Dosing Profiles (all students) | Module 3 Pharmacology Handbook (available on Moodle) | Online Zoom Tutorial on Module 3 |

Week 4 - 29 Mar 2021

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|---|
| Module 4 Drug Development and Therapeutic Drug Monitoring (all students) | Module 4 Pharmacology Handbook (available on Moodle) | Online Zoom Tutorial on Module 4 |
| Week 5 - 05 Apr 2021 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Module 5 Drugs for Chronic Cardiovascular Conditions (all students) | Module 5 Pharmacology Handbook (available on Moodle) | Online Zoom Tutorial on Module 5 Introductory Pharmacology Quiz Due: Week 5 Friday (9 Apr 2021) 5:00 pm AEST |
| Vacation Week - 12 Apr 2021 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Week 6 - 19 Apr 2021 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Module 6 Drugs for Thrombosis and Haemostasis (all students) | Module 6 Pharmacology Handbook (available on Moodle) | Online Zoom Tutorial on Module 6 |
| Week 7 - 26 Apr 2021 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Module 7 Drugs for Common Chronic Non-cardiovascular Conditions (all students) | Module 7 Pharmacology Handbook (available on Moodle) | Online Zoom Tutorial on Module 7 |
| Week 8 - 03 May 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 Pharmacology Handbook (available on Moodle) | Online Zoom Tutorial on Module 8 |
| Week 9 - 10 May 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 Pharmacology Handbook (available on Moodle) | Online Zoom Tutorial on Module 9 Case study drug review Due: Week 9 Friday (14 May 2021) 5:00 pm AEST |
| Week 10 - 17 May 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 Pharmacology Handbook (available on Moodle) | Online Zoom Tutorial on Module 10 |
| Week 11 - 24 May 2021 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Module 11 Drugs which induce Cardiotoxicity AND Drugs of Abuse (CV69) OR Drugs for Treating Emergency Cardiovascular Conditions AND Drugs of Abuse (CG95) | Module 11 Pharmacology Handbook (available on Moodle) | Online Zoom Tutorial on Module 11 |

Week 12 - 31 May 2021

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

Term Specific Information

BMSC12014 is a modularised unit

BMSC12014 is essentially comprised of three 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 will be covering different content. The unit has been structured in this manner to ensure that you are learning the most relevant material for your health profession. The modularised nature of this unit also applies to the assessment items (particularly Assessment Tasks 2 and 3) i.e. for the Written Assignment and Online Test, you'll be answering different case studies/questions depending on your course. Please note, however, that the level of difficulty/format of the unit resources and assessment tasks is the same for all courses.

Lectures and Tutorials

All lectures for this unit are pre-recorded and will be available on the unit's Moodle site. Live tutorials will be delivered each week using Zoom. During these sessions, we will cover practice Online Quiz/Test questions to ensure that you are comfortable with answering the style of questions which form these assessment tasks. All tutorials will be recorded and made available for later viewing on the Moodle site.

Readings in this Unit

All readings for this unit come from the 'Pharmacology Handbook' notes available on the Moodle Site. If you would like additional readings to aid your study, you're welcome to purchase the supplementary textbook (i.e. Pharmacology for Health Professionals). Please note that it is purely 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. Please do not feel too shy or silly to ask questions on the forum - you will not be alone in your query! 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 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 and interact with the human body. After learning about these concepts in Weeks 1-4, you will complete an Online Quiz in order 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 tutorials.

The Quiz will open at 5pm on Monday of Week 5 (i.e. 05th April 2021) and will close on Friday of Week 5 (i.e. 09th April 2021). You will have only one (1) attempt to complete the Quiz. Your score from the 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. 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 (9 Apr 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 (30 Apr 2021)

This Quiz will be graded manually so that you can receive individualised feedback on your attempt.

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

- [Harvard \(author-date\)](#)
- [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

In your role as a health professional, you may be expected to find, appraise and distill information from the scientific literature in order to provide appropriate patient care. This assessment task provides you with an opportunity to practice this skill of researching and critically analysing the scientific literature in order to solve clinically-important problems.

You will be provided with course-specific case studies and a series of questions which will require you to compare the indications, mechanisms of action, routes of administration, side effects, drug interactions and/or contraindications of preselected drugs. Using knowledge gained from researching the scientific literature, you will identify the drug best suited to solving each case study. When providing your answers, you will need to use sources/references from the scientific literature in order to support and validate your decisions. Peer-reviewed journal articles should form the basis of your research and arguments. All of the resources you will need to help you prepare your submissions for this assessment task will be available on the Moodle site.

Assessment Due Date

Week 9 Friday (14 May 2021) 5:00 pm AEST

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

Return Date to Students

Week 11 Friday (28 May 2021)

Results and feedback will be available via Moodle.

Weighting

30%

Minimum mark or grade

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

Assessment Criteria

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

follows:

- Fundamental content - 20 marks available for the 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 logical and critical evaluation of the literature in order to support decisions for solving clinically-relevant case studies.
- Referencing - 10 marks available for appropriate formatting of in-text references and reference list (as per Harvard OR Vancouver guidelines).
- Written style/Overall presentation - 10 marks available for correct spelling, grammar/punctuation and sentence structure.

Referencing Style

- [Harvard \(author-date\)](#)
- [Vancouver](#)

Submission

Online

Submission Instructions

Your submission is to be submitted online 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

The purpose of this assessment task is to evaluate your understanding of the drugs presented in this unit. You will complete one (1) Online Test which is comprised of five (5) Questions (each worth 20 marks = total of 100 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 60% to your final grade, and you must obtain at least 50% of the available marks to be eligible to pass the unit.

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.

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

- [Harvard \(author-date\)](#)
- [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

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