



BMSC13010 Pharmacology

Term 3 - 2018

Profile information current as at 11/04/2024 11:38 am

All details in this unit profile for BMSC13010 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

This unit enables you to develop an advanced knowledge and understanding of the fundamental principles of basic and clinical pharmacology including the way drugs interact with cells and the body. The mechanism of action of major drug classes used in the treatment of disorders affecting the autonomic nervous system, the gastrointestinal tract, cardiovascular and pulmonary systems and central nervous system will be examined at the drug-receptor level. Pharmacokinetics, receptor selectivity, efficacy and the optimum route of administration of pharmaceuticals will also be studied. You will be required to demonstrate critical analysis of this content and align this with current practice in your respective courses.

Details

Career Level: *Undergraduate*

Unit Level: *Level 3*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Pre-requisite CG93 Medical Science and CG95 Paramedic Science: BMED19003 Clinical Biochemistry OR BMSC12010 Clinical Biochemistry CB77 Bachelor of Science (Chiropractic): BMSC11005 Foundations of Biochemistry AND BMSC12007 Neurological Physiology and Measurement AND MBIO12013 Microbiology for Health Care AND CHIR12002 Neuroanatomy and Systemic Pathology CB86 Bachelor of Podiatry Practice (Honours): ALLH11001, ALLH11005, HLTH11027, PSYC11010, ALLH11004, ALLH12007, ALLH11006 and HLTH12028

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 3 - 2018

- Distance

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. **Written Assessment**

Weighting: 10%

2. **Written Assessment**

Weighting: 15%

3. **Written Assessment**

Weighting: 25%

4. **Examination**

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

Whilst there was a significant increase in student's satisfaction with the type of feedback provided to assessment items and the speed with which it was returned, some students feel there is still room for improvement of these metrics.

Recommendation

Staff will continue to make feedback to students a priority. It should be noted that the assessment items submitted in term 1 2018 for this unit were returned within the recommended turn around time and this will be upheld moving forward.

Feedback from Student feedback

Feedback

Students enjoyed the enthusiastic lecture presentations however felt that this was a content heavy unit.

Recommendation

Unfortunately due to the nature of the field of pharmacology it can be content heavy, however staff will try and identify ways in which the content can be more evenly presented through the term.

Feedback from Student feedback

Feedback

Students liked the new exam format.

Recommendation

The exam will retain its current format however questions will be altered from term to term.

Unit Learning Outcomes

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

1. Recognise and describe the differing ways in which drugs and chemicals act quantitatively and qualitatively on living organisms.
2. Recall and explain the basic principles of pharmacology - pharmacodynamics, pharmacokinetics, drug design and clinical trials.
3. Recall and classify the major groups of medicines with respect to pathophysiology, their actions and therapeutic applications for medical science, paramedic science and podiatry practice (including local and general anaesthesia, cardiovascular, CNS, gastrointestinal, antimicrobial, respiratory and endocrine).
4. Understand how pharmacological laboratory experiments are conducted by using computer aided learning modules, and interpret the results from these experiments (tables/graphs).
5. Appraise the scientific literature relating to drugs and medicines and communicate this knowledge to your peers

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes				
	1	2	3	4	5
1 - Written Assessment - 10%	•	•	•		•
2 - Written Assessment - 15%		•	•	•	
3 - Written Assessment - 25%	•	•			•
4 - Examination - 50%	•	•	•		

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
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 - 10%	•		•	•		•	•			
2 - Written Assessment - 15%		•	•			•				
3 - Written Assessment - 25%	•	•	•	•	•	•	•	•		
4 - Examination - 50%	•	•	•							

Textbooks and Resources

Textbooks

BMSC13010

Prescribed

Rang and Dale's Pharmacology

Edition: 8th (2015)

Authors: Rang, Ritter, Flower and Henderson

Elsevier

London , UK , UK

ISBN: 9780702053627

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)
- Computer-aided learning modules (CALs)

Referencing Style

All submissions for this unit must use the referencing style: [Vancouver](#)
For further information, see the Assessment Tasks.

Teaching Contacts

Andrew Fenning Unit Coordinator
a.fenning@cqu.edu.au

Schedule

Week 1 - 05 Nov 2018

Module/Topic	Chapter	Events and Submissions/Topic
Drug-receptor interactions/Drug targets/Signal transduction (Lectures 1-3)	Online course material and PowerPoint notes/lecture videos Chapters 2 and 3 from the textbook	Prerecorded ECHO360 lecture

Week 2 - 12 Nov 2018

Module/Topic	Chapter	Events and Submissions/Topic
Pharmacokinetics (Lectures 4-5); Clinical Trials (Lecture 6)	Online course material and PowerPoint notes/lecture videos Chapters 8, 9 and 10 from the textbook	Prerecorded ECHO360 lecture

Week 3 - 19 Nov 2018

Module/Topic	Chapter	Events and Submissions/Topic
Autonomic Pharmacology (Lectures 7-8); Cardiovascular 1 (Lecture 9)	Online course material and PowerPoint notes/lecture videos Chapters 12, 13 and 14 from the textbook	Prerecorded ECHO360 lecture

Week 4 - 26 Nov 2018

Module/Topic	Chapter	Events and Submissions/Topic
Cardiovascular 2-4 (Lectures 10-12)	Online course material and PowerPoint notes/lecture videos Chapters 21, 22 and 23 from the textbook	Prerecorded ECHO360 lecture

Vacation Week - 03 Dec 2018

Module/Topic	Chapter	Events and Submissions/Topic
--------------	---------	------------------------------

Week 5 - 10 Dec 2018

Module/Topic	Chapter	Events and Submissions/Topic
CNS Pharmacology 1-3 (transmitters, depression, psychosis, ageing) (Lectures 13-15)	Online course material and PowerPoint notes/lecture videos Chapters 37, 38, 39, 40, 44, 45, 46 and 47 from the textbook	Prerecorded ECHO360 lecture Drug Poster Due: Week 5 Monday (10 Dec 2018) 11:45 pm AEST

Week 6 - 17 Dec 2018

Module/Topic	Chapter	Events and Submissions/Topic
CNS - drugs of abuse, analgesia and anaesthesia (Lectures 16-18)	Online course material and PowerPoint notes/lecture videos Chapters 41, 42, 43, 48 and 49 from the textbook	Prerecorded ECHO360 lecture

Week 7 - 31 Dec 2018

Module/Topic	Chapter	Events and Submissions/Topic
Antibiotics, antifungals and antiseptics (Lectures 19-21)	Online course material and PowerPoint notes/lecture videos Chapters 50, 51 and 53 from the textbook	Prerecorded ECHO360 lecture

Week 8 - 07 Jan 2019

Module/Topic	Chapter	Events and Submissions/Topic
Obesity, gastrointestinal, respiratory and endocrine pharmacology (Lectures 22-24)	Online course material and PowerPoint notes/lecture videos Chapters 28, 30, 32 and 35 from the textbook	Prerecorded ECHO360 lecture Computer-aided learning practical Due: Week 8 Monday (7 Jan 2019) 11:45 pm AEST

Week 9 - 14 Jan 2019

Module/Topic	Chapter	Events and Submissions/Topic
All content delivered - revision		

Week 10 - 21 Jan 2019

Module/Topic	Chapter	Events and Submissions/Topic
All content delivered - revision		

Week 11 - 28 Jan 2019

Module/Topic	Chapter	Events and Submissions/Topic
All content delivered - revision		Complex reasoning Due: Week 11 Tuesday (29 Jan 2019) 11:45 pm AEST

Week 12 - 04 Feb 2019

Module/Topic	Chapter	Events and Submissions/Topic
All content delivered - revision		

Exam Week - 11 Feb 2019

Module/Topic	Chapter	Events and Submissions/Topic
--------------	---------	------------------------------

Term Specific Information

Your teaching team for T2 2018

Your unit coordinator is Dr Andrew Fenning. You can contact me using the forum on the unit's Moodle site, via phone (0749232568) or email (a.fenning@cqu.edu.au).

The unit

BMSC13010 Pharmacology fits into your course as a direct follow-on to BMSC12010 (Clinical Biochemistry) incorporating important aspects of your learning journey to date such as physiology, anatomy, pathophysiology, cardiorespiratory physiology and neurophysiology as examples. Successfully completing BMSC13010 allows for important scaffolding to other third level (advanced) units such as Paramedic and Podiatry specific pharmacology units, clinical measurement units and BMSC13009 Immunology. BMSC13010 is a core unit in several courses, including:

- Bachelor of Medical Science (CG93)
- Bachelor of Medical Laboratory Science (CL10)
- Bachelor of Paramedic Sciences (CG95)
- Bachelor of Podiatry (CB86)

And as electives for:

- Bachelor of Science (CU18)
- Bachelor of Health Science (Allied Health) (CB66)

Expectations - boldly go.....(where others have gone before!)

Despite the rumoured tough nature of this unit that does the rounds (yes - the unit contains new content which will be the first major focus you've experienced on how drugs work) the class always raises the bar! This is illustrated by the excellent success rates (94% of students passed) and the percentage of students who achieved a HD (14%), D (38%), C (23%) or P (20%) grades during Term 3 2017. In an analysis (EasyConnect data - tracks your interaction with Moodle) of why a student achieved a HD, D or C grade compared to a P or F grade the answer appears to be linked to your meaningful engagement. HD students interact with the material almost 2.5 times as much as a P student (Term 3 2017 EasyConnect). That is a significant difference in the level of engagement and potential for learning!

Delivery and study commitment

All material for the unit will be made available from the point of Moodle going live. This unit has all of the lecture content presented over the first 8 weeks of the unit schedule/unit Moodle page. However, these are all pre-recorded during Term 1 2018 and will be available from the point of Moodle "going live". The 8 weeks of content delivery will have an associated recorded ECHO360 lecture (and PowerPoint file) and be delivered in a weekly fashion typically of 2.5-3 hours in length. The PowerPoint file and lecture content are the primary delivery medium for this unit and will be where the examination questions are drawn from. The final 4 weeks of the unit schedule have no content delivery - this has been intentionally left free to allow for consolidation and self managed/directed study and completion of any remaining assessment items. As the examination forms an integral component of your tasks during the term, you should use this time to prepare for this item. You still have the same amount of content/contact time as other units - it has just been designed and delivered in a topic format of 8 weeks x 3 hours rather than 12 weeks x 2 hours. As with other Units - the design is such that students are expected to spend on average 10-12.5 hours per week (150 hours total) on associated study activities for this Unit. As a rough "time budget estimate" the approximate guide for your study per assessment is as follows:

- Assessment item 1 Drug Poster (10%) - 20 hours
- Assessment item 2 CALs (15%) - 15 hours
- Assessment item 3 Complex reasoning - imaginary drug review (25%) - 35 hours
- Assessment item 4 Examination (50%) - 80 hours

If you consider the lecture content and other activities will total approximately 40 hours, your own study needs to account for the rest (110 hours). Assessment items 1, 2 and 3 have elements which are "time on task" activities to also contribute to the weekly content and hence the generic exam study for this Unit. Use these details as a guide because your study journey and requirements are unique (some students may require less or more hours than suggested to pass).

Brief assessment overview and tips

- Assessment item 1 Drug poster - introduction to all of the main areas of pharmacology by focussed study on one drug/toxin
- Assessment item 2 CALs - a simulated series of laboratory experiments which allow you to visualise drug-

receptor interactions and responses

- Assessment item 3 Imaginary drug review - a mini review of your choice of an imaginary drug which requires you to integrate knowledge from the previous assessment items and formulate a mechanism of action and how you would test the drug
- Assessment item 4 Examination - content knowledge and problem solving

Make sure you cite correctly and gather sufficient reference materials for the written assessment items (#1 and 3 in particular) - this was a common feature for a less than optimal grade.

Unique aspects and logistics of Term 3 study to keep in mind

- contains both the Mid-term break week (3rd-7th December) and the Christmas closure break (24th December-1st January) - this means that you effectively have 14 weeks of actual chronological time during Term 3 rather than typical 12/13 weeks in the other Terms = more time
- be mindful of the vacation weeks above interrupting your study (partly the reason why I've made the full unit material available from Moodle going live allowing further time to complete the unit)
- **the DE/SE exams from T2 2018 will be held during the Mid-term break week (3rd-7th December); if you have a DE/SE from T2 please check your timetable for the latest information**
- **with all of the material and content available from Moodle two weeks before term, you will theoretically have 16 weeks of study available - the opportunity is there for you to maximise your potential and manage your study load**

Assessment Tasks

1 Drug Poster

Assessment Type

Written Assessment

Task Description

This unit and assessment item will likely be your first concentrated (pun intended) experience in the discipline of pharmacology. The action and effects of drugs and toxins will likely form a significant component of your future profession either in the design, testing or clinical use of such compounds. This assessment item will provide you with the basic fundamentals of pharmacology in context by researching one of the compounds listed below. Additionally you will develop specific knowledge about the class the drug/toxin belongs to.

This assignment is centred on one of the following drugs/toxins - **amiodarone, losartan, tenecteplase, sildenafil, midazolam, fentanyl, dexamethasone, haloperidol, escitalopram, LSD, agalsidase beta, VX nerve agent/gas, amphetamine, flakka (MDPV and PVP), tetracycline or terbinafine.**

Before commencing your research, you are to nominate which drug you wish to report on via the unit Moodle site using the survey located under the "essential information" tab. Please note the survey has been designed so that a maximum of 10 people can nominate to report on any one drug. Once 10 people have selected any one drug it will no longer allow others to record this option, in which case you will be required to select any of the remaining choices. Assignment submissions will not be accepted unless you have nominated which drug you will report on in the survey, this prevents students from submitting assessments on topics which have already exhausted the maximum allocation. The survey will be open from Moodle "going live" (before the beginning of Term). There is no scheduled closing date for the survey, but as noted above, you are required to complete this task in order for your assignment submission to be accepted.

Once you have nominated your drug, you must create an electronic poster presentation using PowerPoint or a poster editor of your choice. Posters are a great way to succinctly present information and are often used at scientific conferences to deliver content. To give you an idea of how scientific posters are formatted for presentation some examples will be uploaded to the unit Moodle site. On your poster you will be required to outline the following information as it relates to your compound - **pharmacodynamics, receptor targets (agonist, antagonist or protein target), pharmacokinetics, clinical responses, clinical trials, preclinical testing, side effects and any interesting/unusual facts.** When researching information you are advised to use peer-review sources. The use of internet pages and information released by the pharmaceutical company which produce the drug you are reporting on is discouraged. In text referencing and a reference list must be included on your poster. In addition to examining the pharmacological content on your poster, you will also be assessed on the quality of information sources used, overall format and layout, and spelling and grammar. You may use any dimensions you want for your poster provided they do not exceed 85cm wide and 100cm high. When formatting your poster it is advisable to select complimentary colours for

the background and writing, the font should be a suitable size in comparison to the dimensions of your presentation and you should avoid having blank spaces. Whilst you may use images in your presentation, any you do incorporate must contain appropriate titles, be referenced in text and when necessary include a reference. Whilst not compulsory, it is advisable to include subheadings as these often help to improve readability.

Assessment Due Date

Week 5 Monday (10 Dec 2018) 11:45 pm AEST

Return Date to Students

Week 6 Thursday (20 Dec 2018)

Weighting

10%

Minimum mark or grade

50%

Assessment Criteria**Marking criteria:**

Content - 8 marks Information relating to your drug of choice which you present on your poster includes clinical uses, development and clinical trials, toxicology, cellular mechanisms of action, side effects and interactions, pharmacokinetics, comparisons with other drugs or toxins and interesting facts where appropriate. Information must be concise and easy to comprehend.

Organisation and presentation - 8 marks Your poster should have high reader impact, good use of colour schemes and font styles / sizes should be appropriate and easy to read (avoid clashing colours which don't provide contrast between the font and the background). Content should be clearly presented in English, paying attention to spelling and grammar. The dimensions of your poster are not to exceed 85 cm wide by 100cm high and there are to be no empty / blank spaces. Titles and heading have been used appropriately.

References - 4 marks All sources of information (including any non-peer review sources) must be referenced in text and in small print at the end of the poster. It is not acceptable to insert in text references at the end of a paragraph or section, they must be inserted immediately after the idea has been presented or at the end of the sentence. The references should be presented in "Harvard" format. In addition to the presentation of references you will be assessed on the quality of information sources you use. You should use textbooks and class resources sparingly. The use of recent peer review articles is highly desirable and use of non-peer review sources should be used sparingly. Any images which are used contain appropriate titles and a reference.

Total = 20 marks

Referencing Style

- [Vancouver](#)

Submission

Online

Learning Outcomes Assessed

- Recognise and describe the differing ways in which drugs and chemicals act quantitatively and qualitatively on living organisms.
- Recall and explain the basic principles of pharmacology - pharmacodynamics, pharmacokinetics, drug design and clinical trials.
- Recall and classify the major groups of medicines with respect to pathophysiology, their actions and therapeutic applications for medical science, paramedic science and podiatry practice (including local and general anaesthesia, cardiovascular, CNS, gastrointestinal, antimicrobial, respiratory and endocrine).
- Appraise the scientific literature relating to drugs and medicines and communicate this knowledge to your peers

Graduate Attributes

- Communication
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence

2 Computer-aided learning practical

Assessment Type

Written Assessment

Task Description

Gaining familiarity on where and how drugs act on tissues is an important experimental and clinical skill used in your future professional and personal lives. This task requires you to complete an online Computer-aided learning (CAL) module and submit your responses / answers which are derived from this activity. The CAL is a virtual pharmacology experiment, which will enable you to perform the organ bath technique without having to step foot into a laboratory. As noted in lectures, organ bath experiments enable pharmacologists to investigate the physiology and pharmacology of in vitro tissue preparations. The theory behind the organ bath technique is discussed further in the CAL instruction manual which is available on the unit Moodle site under the "essential information" tab, as are the step-by-step instructions for using this online module.

In order to complete this activity, you are required to follow the instructions outlined in the instruction manual and collect experimental data generated from the CAL software. Once you have collected your data you are required to prepare cumulative concentration response curves and answer a series of questions which relate to the online module you just completed. The completion of this activity will enable you to further understand concepts relating to agonists, antagonists, EC50s, cumulative concentration responses and will enable you to get an introductory understanding of how pharmacological experiments are conducted. This task may also assist in completion of assessment item 3.

Assessment Due Date

Week 8 Monday (7 Jan 2019) 11:45 pm AEST

Return Date to Students

Week 10 Monday (21 Jan 2019)

Weighting

15%

Minimum mark or grade

50%

Assessment Criteria

This task requires the submission of data, graphs and responses generated as a result of completing a CAL module. The data tables and graphs you submit will be assessed for ability to interpret and present the generated data in a professional manner. The written responses you submit each contain weighted marks as outlined in the CAL instruction manual and will be marked either correct or incorrect based upon your understanding of key concepts and the interpretation of the results you gain.

Referencing Style

- [Vancouver](#)

Submission

Online

Learning Outcomes Assessed

- Recall and explain the basic principles of pharmacology - pharmacodynamics, pharmacokinetics, drug design and clinical trials.
- Recall and classify the major groups of medicines with respect to pathophysiology, their actions and therapeutic applications for medical science, paramedic science and podiatry practice (including local and general anaesthesia, cardiovascular, CNS, gastrointestinal, antimicrobial, respiratory and endocrine).
- Understand how pharmacological laboratory experiments are conducted by using computer aided learning modules, and interpret the results from these experiments (tables/graphs).

Graduate Attributes

- Problem Solving
- Critical Thinking
- Information Technology Competence

3 Complex reasoning

Assessment Type

Written Assessment

Task Description

This task requires you to outline a series of experiments you could use to verify the pharmacological actions of an

imaginary drug. Communication, problem solving and applying knowledge to a variety of scenarios will be part of your everyday future in health care. This fictitious drug task will require you to apply your understanding of pharmacological principles to postulate a mythical's drug's cellular target(s), mechanism of action and physiological effects. In a real world context, pharmacologists are required to test new chemical compounds and work to identify the physiological effects they have within the body (for example, does a new compound increase heart rate?). Once the physiological effects for new compounds have been identified, pharmacologists must then work to identify the mechanism through which the observed effects are mediated (for example, what receptors are activated or blocked, what proteins undergo phosphorylation, what genes are turned off and on).

In this assessment item you are given the physiological effects for three imaginary drugs. **You are to choose one of the three options to report on.** Once you have made your choice you are to describe a series of experiments you could use to test the mechanism/s through which the imaginary drug is mediating its effects.

Imaginary drugs you can choose from -

- **Cholepress** - revolutionary blood pressure and cholesterol lowering medication
- **Painbegone** - provides powerful neuropathic pain relief without any addictive side effects
- **Bactofunge** - revolutionary antimicrobial (anti-fungal and antibiotic effects) which produces very little antibiotic resistance

As a guide, you may like to consider how experimental techniques we have covered in CALs could be used, clinical trials, along with any other methods you have identified during your literature search to determine the mechanism of action for your imaginary drug. It would be advantageous to position your proposed experiments with a discussion on existing compounds that may have similar properties. The use of peer-review journal articles as information sources is expected (a minimum of 10 primary references are required for this assessment item), whilst the use of internet / pharmaceutical company websites is discouraged. Word limit for this assessment item is 2000 words. By completing this task it is hoped you will gain a greater understanding of receptor targets and how drugs work, demonstrate basic knowledge of preclinical tissue bath testing and clinical trials, and demonstrate creative written expression and advanced literature review and integration.

Assessment Due Date

Week 11 Tuesday (29 Jan 2019) 11:45 pm AEST

Return Date to Students

Week 12 Friday (8 Feb 2019)

Weighting

25%

Minimum mark or grade

50%

Assessment Criteria

A detailed marking rubric criteria sheet can be found on the unit Moodle page, however assessment will be based on the knowledge of theory, rationalization and justification of your arguments/ideas/proposed experiments, quality and quantity of information sources used, presentation of references, presentation and formatting the content (including images, figures, or tables) and spelling and grammar.

Marking criteria:

Fundamental content - 15 marks establishing a mechanism of action

Positioning of your arguments - 15 marks logical and critical evaluation of the literature and techniques

Writing style/overall presentation - 10 marks excellent grammar and proofing

Referencing - 10 marks correct citation and referencing used

Total = 50 marks

Referencing Style

- [Vancouver](#)

Submission

Online

Submission Instructions

Your submission should be in word format

Learning Outcomes Assessed

- Recognise and describe the differing ways in which drugs and chemicals act quantitatively and qualitatively on living organisms.
- Recall and explain the basic principles of pharmacology - pharmacodynamics, pharmacokinetics, drug design and clinical trials.
- Appraise the scientific literature relating to drugs and medicines and communicate this knowledge to your peers

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

Examination

Outline

Complete an invigilated examination.

Date

During the examination period at a CQUniversity examination centre.

Weighting

50%

Length

180 minutes

Minimum mark or grade

50%

Exam Conditions

Closed Book.

Materials

Dictionary - non-electronic, concise, direct translation only (dictionary must not contain any notes or comments).

Calculator - non-programmable, no text retrieval, silent only

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